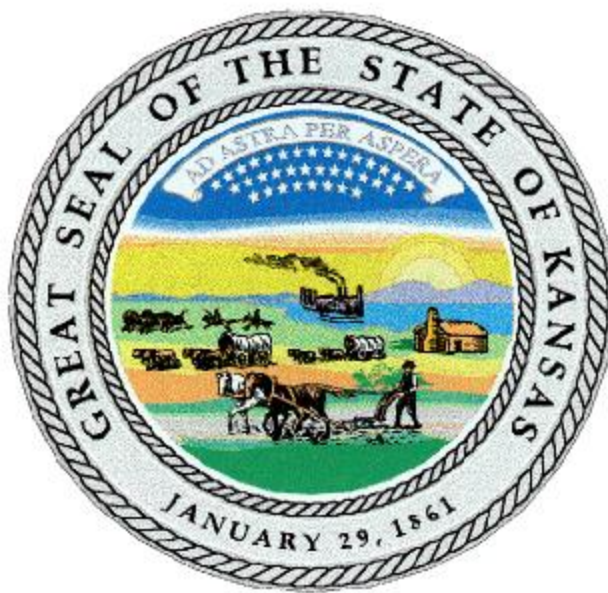


***Kansas Public Employees
Retirement System***



Valuation Report as of December 31, 2001

Kansas Public Employees Retirement System Actuarial Valuation Report

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A MILLIMAN GLOBAL FIRM

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July 10, 2002

Board of Trustees
Kansas Public Employees Retirement System
611 S. Kansas Ave., Suite 100
Topeka, KS 66603

Dear Members of Board:

At your request, we have conducted our annual actuarial valuation of the Kansas Public Employees Retirement System as of December 31, 2001. The major findings of the valuation are contained in this report. There was no change in plan provisions, actuarial assumptions, and methods from the prior valuation.

In preparing our report, we relied, without audit, on information (some oral and some written) supplied by the System's staff. This information includes, but is not limited to, statutory provisions, member data and financial information. In our examination of these data, we have found them to be reasonably consistent and comparable with data used for other purposes. It should be noted that if any data or other information is inaccurate or incomplete, our calculations may need to be revised.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted principles and practices which are consistent with the principles prescribed by the Actuarial Standards Board (ASB) and the Code of Professional Conduct and Qualification Standards for Public Statements of Actuarial Opinion of the American Academy of Actuaries.

We hereby further certify that all costs, liabilities, rates of interest and other factors for the System have been determined on the basis of actuarial assumptions and methods which are internally consistent, individually reasonable (taking into account the experience of the Plan and reasonable expectations of future experience); and which, in combination, offer our best estimate of anticipated experience under the Plan. Nevertheless, the emerging costs will vary from those presented in this report to the extent actual experience differs from that projected by the actuarial assumptions. The Board of Trustees has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in Appendix C.

Actuarial computations presented in this report are for purposes of determining the actuarial contribution rates for funding the System. Any distribution of this report must be in its entirety including this cover letter, unless prior written consent from Milliman USA is obtained.



Determinations for purposes other than this may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

We would like to express our appreciation to Glenn Deck, Executive Director of the System, and to members of his staff, who gave substantial assistance in supplying the data on which this report is based.

I, Patrice A. Beckham F.S.A., am a member of the American Academy of Actuaries and a Fellow of the Society of Actuaries, and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

I, Brent A. Banister F.S.A., am a member of the American Academy of Actuaries and a Fellow of the Society of Actuaries, and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

We respectfully submit the following report and look forward to discussing it with you.

MILLIMAN USA, Inc.

Sincerely,

A handwritten signature in black ink, written in a cursive style, that reads "Patrice Beckham".

Patrice A. Beckham, F.S.A.
Principal and Consulting Actuary

A handwritten signature in black ink, written in a cursive style, that reads "Brent A. Banister".

Brent A. Banister, F.S.A.
Actuary

SECTION I

BOARD SUMMARY

OVERVIEW

The Kansas Public Employees Retirement System is an umbrella organization which administers the following three statewide pensions groups under one plan: the Kansas Public Employees Retirement System (KPERS), the Kansas Police and Firefighter's Retirement System (KP&F) and the Kansas Retirement System for Judges (Judges). This report presents the results of the December 31, 2001 actuarial valuations for each of the Systems. The primary purposes of performing valuations are to:

- determine the employer contribution rates required to fund each System on an actuarial basis,
- determine the statutory employer contribution rates for each System,
- disclose asset and liability measures as of the valuation date,
- determine the experience of the System since the last valuation date, and
- analyze and report on trends in System contributions, assets, and liabilities over the past several years.

There were no changes in the actuarial assumptions, methods or procedures from the last valuation. There also were no changes in benefit provisions since the last valuation.

The valuation results provide a "snapshot" view of the System's financial condition on December 31, 2001. The unfunded actuarial liability increased by \$475 million, due to various factors, the most significant of which was the loss from investment return. A detailed analysis of the change in the unfunded actuarial liability from December 31, 2000 to December 31, 2001 is shown on page 5.

In KPERS, State/School and Local employers do not contribute the full actuarial contribution rate. Based on legislation passed in 1993, the employer contribution rates certified by the Board may not increase by more than the statutory cap. Currently, the statutory cap is 0.20% for State/School and 0.15% for Local. Based on the results of the current valuation and assuming an 8% return on the market value of assets in 2002 and beyond and that all other assumptions are met in the future, the statutory and actuarial contribution rates will not converge before 2033, the end of the amortization period. As a result, the unfunded actuarial liability will grow steadily and the actuarial contribution rate will increase significantly.

The valuation shows that the current assets plus the present value of future contributions are not equal to the present value of future benefits and thus the System is not in "actuarial balance." This situation creates a long term funding concern.

As the System's actuary we strongly recommend action be taken to increase future contributions to a level which will restore the System to actuarial balance. Due to recent negative investment experience and the delayed reflection of market experience in the actuarial value of assets, it is expected that additional actuarial losses will be reflected in the unfunded actuarial liability over the next few years, which will in turn exacerbate the long term funding concerns. It is in the System's best financial interest for additional contributions to begin as soon as possible. There is a special study in progress that is considering various alternatives to address the long term funding of the System.

CONTRIBUTION RATES

The funding objective of the System is to establish contribution rates that over time will remain relatively level, as a percentage of payroll, and to pay off the unfunded actuarial liability by 2033. Actuarial contribution rates consist of a normal cost rate and an amortization payment. The contribution rates in the December 31, 2001 valuation will set rates for fiscal year end 2005 for the State and 2004 for Local employers.

A summary of actuarial and statutory employer contribution rates for the Retirement System (excluding the statutory contribution for the Death and Disability Program) follows:

System	December 31, 2001 Valuation		Difference
	Actuarial	Statutory	
State/School	7.69%	4.78% ¹	2.91%
Local	4.64%	3.22% ¹	1.42%
TIAA	2.76%	2.76%	0.00%
Police & Fire -Uniform Rates ²	9.47%	9.47%	0.00%
Judges	18.67%	18.67%	0.00%

System	December 31, 2000 Valuation		Difference
	Actuarial	Statutory	
State/School	7.05%	4.58% ¹	2.47%
Local	4.13%	3.07% ¹	1.06%
TIAA	2.20%	2.26%	0.00%
Police & Fire -Uniform Rates ²	6.86%	6.86%	0.00%
Judges	16.67%	16.67%	0.00%

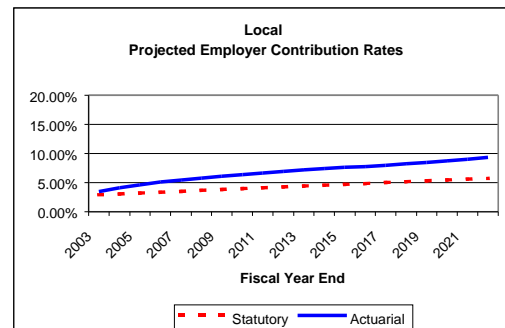
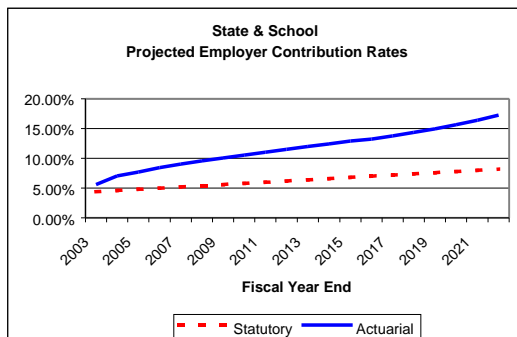
¹ Rates, by statute, are allowed to increase by a maximum of 0.20% and 0.15% per year plus the cost of any benefit enhancements for State and Local employers respectively.

² For KP&F, the statutory contribution rate is equal to the "Uniform" rate. The rate shown is for local employers. The rate for State employers is 9.16%. The uniform rate does not include the payment required to amortize the unfunded past service liability or any 15% excess benefit liability determined separately for each employer.

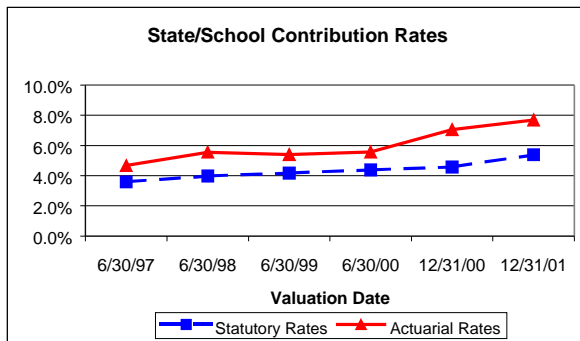
Employer Contribution Rates for Correctional Employee Groups are:

Retirement Age 60: 7.82%
 Retirement Age 55: 8.23%

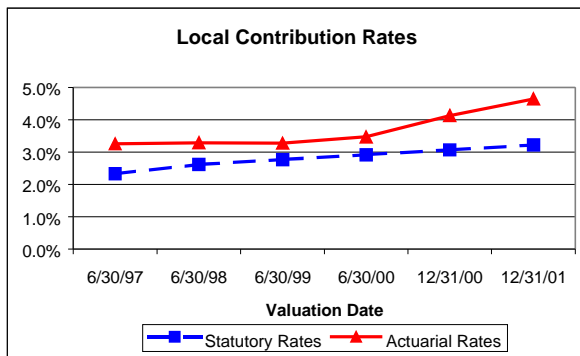
As mentioned earlier, State/School and Local employers do not contribute the full actuarial contribution rate. Based on the current valuation, there is a difference (shortfall) between the actuarial and statutory contribution rates of 2.91% and 1.42% respectively for the State/School and Local groups. Assuming an 8% return on the market value of assets for 2002 and beyond and that all other actuarial assumptions are met in the future the statutory and actuarial contribution rates will not converge before the end of the current amortization period.



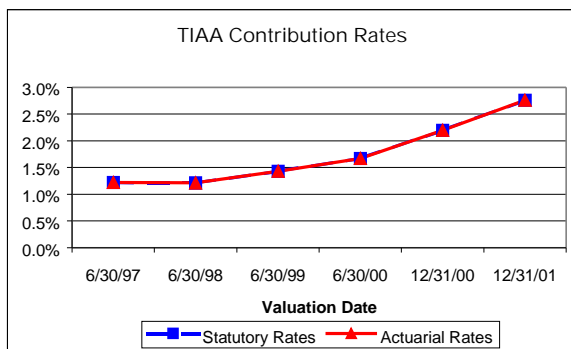
Employer contribution rates for all groups increased in the 2001 valuation as compared to the 2000 valuation. The negative investment experience during calendar year 2001 was the most significant factor contributing to the increase in contribution rates. As the remainder of the deferred investment loss is recognized in the actuarial value of assets in future years, contribution rates can be expected to increase. Historical contribution rates for each group are shown below:



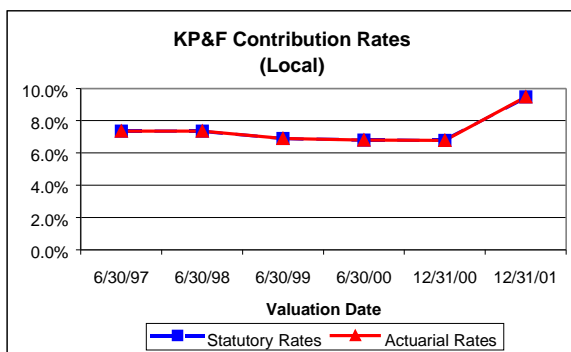
The difference between the actuarial and statutory rates has fluctuated over the past few years as the actuarial rate has increased, at times, more than the statutory rate.



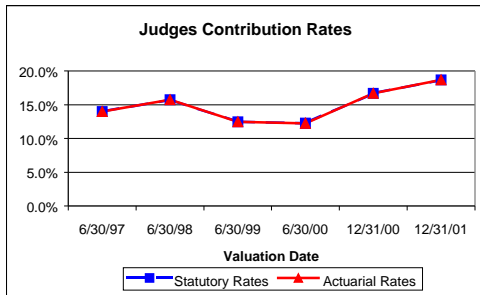
In recent years, the shortfall between the actuarial and statutory contribution rates has increased.



This group is very small and the amortization period is short, which makes the contribution rate subject to a great deal of volatility.



The rate for KP&F is heavily impacted by investment experience. The low investment return for 2001 on the actuarial value of assets resulted in a significant increase in the 12/31/01 rate. This can be expected to continue as investment losses from prior years are recognized in the actuarial value of assets.



The Judges System has a small membership and therefore is subject to greater volatility. Significant changes in the actuarial assumptions in the December 31, 2000 valuation and investment experience in recent years have resulted in an increase in costs.

EXPERIENCE - ALL SYSTEMS COMBINED
December 31, 2000 – December 31, 2001

Several factors contributed to the change in the Systems' assets, liabilities, and actuarial contribution rates between the December 31, 2000 and December 31, 2001 actuarial valuations. On the following pages each component is examined.

ASSETS

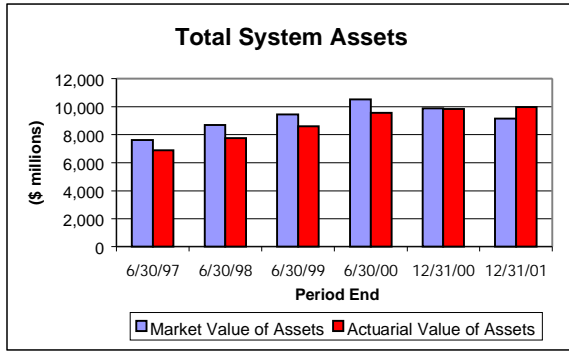
As of December 31, 2001, the System had total funds, when measured on a market value basis, of \$9.146 billion, excluding assets held for the Group Insurance and Optional Life reserves. This was a decrease of \$0.728 billion from the December 31, 2000 figure of \$9.874 billion. The components of the change in the market value of assets for the Retirement System (in millions) are set forth below:

	Market Value \$(millions)
Assets, December 31, 2000	\$9,874
• Employer and Member Contributions	405
• Benefit Payments and Expenses	(647)
• Investment Income	(486)
Assets, December 31, 2001	\$9,146

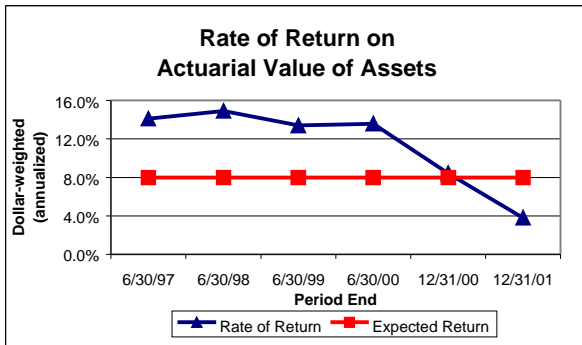
The market value of assets is not used directly in the calculation of contribution rates. An asset valuation method is used to smooth the effect of market fluctuations. The actuarial value of assets is equal to the expected asset value based on the assumed interest rate plus 1/3 of the difference between the actual market value and the expected asset value. See Table 3 on page 22 for the detailed development of the actuarial value of assets as of December 31, 2001 for each System.

Due to the asset smoothing method, there is \$817 million of deferred investment loss that has not yet been recognized. Absent investment returns well in excess of 8% in the next few years to offset this deferred investment loss it will gradually be reflected in the actuarial value of assets. As this occurs through the smoothing method, the valuation results will show an actuarial loss.

The annualized dollar-weighted rate of return for 2001 measured on the actuarial value of assets was 3.8% and, measured on the market value of assets, was (5.0)%. The actuarial value of assets as of December 31, 2001 was \$9.963 billion.



Due to rates of return in the 1990's in excess of the actuarial assumption, the market value generally exceeded the actuarial value of assets. The market experience in 2000 and 2001 reversed that trend. The actuarial value of assets now exceeds the market value by \$817 million.



The rate of return on the actuarial (smoothed) value of assets exceeded the assumed rate of 8% until 2001. Rates are expected to remain well below 8% for the short term as deferred investment losses are reflected in the actuarial value of assets.

LIABILITIES

The actuarial liability is that portion of the present value of projected benefits that will not be paid by future employer normal costs or member contributions. The difference between this liability and asset values at the same date is referred to as the unfunded actuarial liability. The unfunded actuarial liability will be reduced if the employer's contributions exceed the employer's normal cost for the year, after allowing for interest earned on the previous balance of the unfunded actuarial liability. Benefit improvements, experience gains and losses, and changes in actuarial assumptions and procedures will also impact the total actuarial liability and the unfunded portion thereof.

The Actuarial Liability and the Unfunded Actuarial Liability for all Systems combined are:

	(\$Millions)
Actuarial Liability	\$11,743
Actuarial Value of Assets	<u>\$ 9,963</u>
Unfunded Actuarial Liability	\$ 1,780

See Tables 4 and 5 on pages 24 to 27 for the detailed development of the actuarial liability by System. The calculation of the Unfunded Actuarial Liability by System is shown in Tables 8 and 9 on pages 33 to 34.

Between December 31, 2000 and December 31, 2001 the change in the unfunded actuarial liabilities for the System as a whole was as follows (in millions):

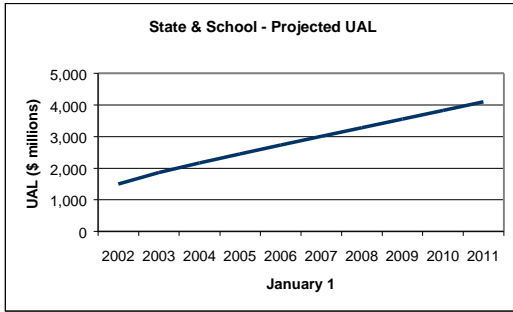
	<u>\$(millions)</u>
(Unfunded) Actuarial Liability, December 31, 2000	\$ (1,305)
<ul style="list-style-type: none"> • effect of contribution cap/time lag • expected increase due to amortization method • loss from investment return • liability experience • all other experience • change in benefit provisions • change in actuarial assumptions • changes arising from audit 	(115) (14) (350) (18) 27 0 0 (5)
(Unfunded) Actuarial Liability, December 31, 2001	\$ (1,780)

A detailed summary of the change in the unfunded actuarial liability by System is shown on page 8.

As mentioned earlier in this report, there is currently \$817 million of deferred investment loss which will eventually be recognized in the actuarial value of assets in the next few years. As the prior investment losses are recognized, the UAL will increase by that amount. In addition, market returns for the first half of calendar year 2002 have been very low. It appears very likely that investment experience for 2002 will be well below the 8% assumption which will result in an additional increase in the UAL next year and an additional amount of deferred investment loss to be recognized later.

When the actuarial cost method was changed by the Legislature in 1993, the payment methodology for the unfunded actuarial liability (UAL) for most of the groups was set in statute as a level percentage of payroll over a 40 year closed period. Payments on the UAL are assumed to increase four percent each year. In the early years of the period, the payment is less than the interest accruing on the UAL. As a result, the dollar amount of UAL is expected to increase for many years before it begins to decline. In addition, with the planned difference in the statutory and actuarial contribution rates prior to convergence, the unfunded actuarial liability is expected to increase by an additional amount each year.

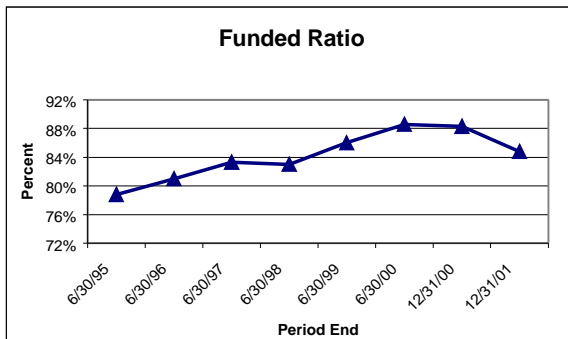
Given the current funded status of the System (including the deferred investment loss) and the scheduled increases in employer contribution rates the unfunded actuarial liability will continue to grow. Even assuming an 8% return on assets for 2002 and all future years and assuming all other assumptions are met, the UAL for the State/School group will exceed \$4 billion with a resulting funded ratio of around 67% by 2012. This dramatic deterioration in the System's financing supports our concerns about the long term funding of the System and the need for a change in the funding plan.



Absent a change in future contribution levels, the unfunded actuarial liability is projected to increase steadily over the next 10 years to over \$4 billion.

An evaluation of the unfunded actuarial liability on a pure dollar basis may not provide a complete analysis since only the difference between the assets and liabilities is reflected. Another way to evaluate the unfunded actuarial liability and the progress made in its funding is to track the funded status, the ratio of the actuarial value of assets to the actuarial liability. This information is shown below (in millions).

	6/30/97	6/30/98	6/30/99	6/30/00	12/31/00	12/31/01
Funded Ratio	83.3%	83.0%	86.0%	88.6%	88.3%	84.8%
Unfunded Actuarial Liability (UAL)	1,376	1,591	1,397	1,233	1,305	1,780



Although the funded status of the System generally improved in the last half of the 1990's, recent changes in actuarial valuation procedures coupled with low investment returns have reduced the funded ratio.

CONTRIBUTIONS

Generally, contributions to the System consist of:

- a "normal cost" for the portion of projected liabilities allocated to service of members during the year following the valuation date, by the actuarial cost method, (except TIAA)
- an "unfunded actuarial liability contribution" for the excess of the portion of projected liabilities allocated to service to date over the actuarial value of assets on hand,

There is also a statutory contribution rate which is used to finance the Death and Disability Program. Contributions for the Death and Disability Program are deposited in a separate trust fund, from which benefits are paid. A separate actuarial analysis and report is prepared for the Death and Disability Program each June 30. Therefore, the death and disability contribution rate is not reflected in this report.

Different actuarial cost methods are used for KPERS, KP&F and Judges (see Appendix C). The change in the actuarial contribution rate from December 31, 2000 to December 31, 2001 and the primary components thereof are shown in the table on page 9.

SUMMARY OF CHANGES IN UAL
DECEMBER 31, 2001 VALUATION

\$(millions)	State/School	Local	TIAA	KP&F*	Judges*	Total
UAL in 12/31/00 Valuation Report	\$1,119.4	\$90.4	\$22.7	\$62.1	\$10.2	\$1,304.8
• Effect of contr cap/timing	97.3	14.2	3.4	(0.1)	0.0	114.8
• Expected increase due to method	22.5	1.5	(6.7)	(3.6)	(0.0)	13.7
• Investment return experience	287.2	61.9	0.7	0.0	0.0	349.8
• Liability experience	(1.6)	19.9	(0.1)	0.0	0.0	18.2
• All other experience	(22.1)	(4.2)	(0.6)	0.4	0.0	(26.5)
• Adjustments from audit	3.3	1.6	0.4	0.0	0.0	5.3
• Change in assumptions	0.0	0.0	0.0	0.0	0.0	0.0
UAL in 12/31/01 Valuation Report	\$1,506.0	\$185.3	\$19.8	\$58.8	\$10.2	\$1,780.1

* The UAL for Judges and KP&F is frozen and as such reflects only changes due to assumption changes or changes in benefit provisions

**SUMMARY OF
CHANGES IN ACTUARIAL CONTRIBUTION RATE
BY SYSTEM
AS OF DECEMBER 31, 2001**

Percentage of Payroll	State/School	Local	TIAA	KP&F	Judges
Actuarial Contribution Rate in 12/31/00 Valuation	7.05%	4.13%	2.20%	6.86%	16.67%
Change due to Amortization of UAL					
• effect of contribution cap/time lag	0.15	0.07	0.43	0.00	0.00
• amortization method	0.04	0.01	(0.01)	0.00	0.00
• investment experience	0.46	0.32	0.09	0.00	0.00
• liability experience	0.00	0.10	(0.01)	0.00	0.00
• all other experience	(0.04)	(0.02)	0.06	0.00	0.00
• assumption change	0.00	0.00	0.00	0.00	0.00
• changes in benefit provisions	0.00	0.00	0.00	0.00	0.00
Change in Normal Cost Rate	0.03	0.03	0.00	2.61	2.00
Actuarial Contribution Rate in 12/31/01 Valuation	7.69%	4.64%	2.76%	9.47%	18.67%

SUMMARY OF HISTORICAL CHANGES IN TOTAL SYSTEM UAL
as of
DECEMBER 31, 2001 VALUATION

\$(millions)	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	6/30 – 12/31/00	2000 – 01	Total
Actuarial Experience vs Assumed										
• Investment	\$102	\$143	\$280	\$323	\$413	\$369	\$441	\$23	\$(350)	\$1,744
• Other	(320)	(72)	(136)	(157)	(104)	(46)	(99)	(84)	9	(1,009)
Assumption Changes	0	96	0	0	(350)	0	0	206	0	(48)
Changes in Data/Procedures	(244)	0	0	0	0	(21)	(71)	(145)**	(5)	(486)
Effect of Contribution Cap/Lag	*	(95)	(70)	(63)	(54)	(78)	(66)	(60)	(115)	(601)
Amortization Method	*	(47)	(38)	(35)	(32)	(30)	(22)	(12)	(14)	(230)
Change in Benefit Provisions	(75)	0	0	0	(88)	0	(19)	0	0	(182)
Total	\$(537)	\$25	\$36	\$68	\$(215)	\$194	\$164	\$(72)	\$(475)	\$(812)

*Not calculated for this year

**Includes the impact of re-establishing the KP&F Supplemental Actuarial Liability and the additional unfunded actuarial liability for the State/School and Local groups not recognized in the prior valuation due to the phase-in of the change actuarial procedures.

Unfunded actuarial liability 6/30/93 : (\$968) million

Unfunded actuarial liability 12/31/01 : (\$1,780) million

SUMMARY OF PRINCIPAL RESULTS
ALL SYSTEMS COMBINED

	12/31/01	12/31/00	% Change
	Valuation	Valuation	
1. PARTICIPANT DATA			
Number of:			
Active Members	145,910	143,591	1.6 %
Retired Members and Beneficiaries	56,115	54,396	3.2
Inactive Members	<u>38,056</u>	<u>35,482</u>	7.3
Total Members	<u>240,081</u>	<u>233,469</u>	2.8
Projected Annual Salaries of Active Members	\$ 5,116,384,351	\$ 4,876,555,038	4.9
Annual Retirement Payments for Retired Members and Beneficiaries	\$ 558,772,421	\$ 523,960,824	6.6
2. ASSETS AND LIABILITIES			
Total Actuarial Liability	\$ 11,743,051,755	\$ 11,140,014,011	5.4
Assets for Valuation Purposes	9,962,917,897	9,835,181,839	1.3
Unfunded Actuarial Liability	1,780,133,858	1,304,832,172	36.4
3. EMPLOYER CONTRIBUTION RATES AS A PERCENT OF PAYROLL			
Normal Cost	4.57%	4.39%	
Amortization of Unfunded Actuarial and Supplemental Liability	<u>2.20%</u>	<u>1.67%</u>	
Actuarial Contribution Rate	6.77%	6.06%	
Statutory Employer Contribution Rate*	<u>4.60%</u>	<u>4.25%</u>	

* Increases in recommended rates for KPERS are limited by statute. Employer rates exclude the contribution for the Death and Disability Program. Employer contribution rates for KP&F consist of a "Uniform" rate plus a payment to amortize any unfunded past service liability.

SUMMARY OF PRINCIPAL RESULTS
KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM
(STATE/SCHOOL)

	12/31/01	12/31/00	
	Valuation	Valuation	% Change
1. PARTICIPANT DATA			
Number of:			
Active Members	105,252	103,647	1.5 %
Retired Members and Beneficiaries	41,307	40,116	3.0
Inactive Members	<u>28,899</u>	<u>27,077</u>	6.7
Total Members	<u><u>175,458</u></u>	<u><u>170,840</u></u>	2.7
Projected Annual Salaries of Active Members	\$ 3,287,503,319	\$ 3,151,774,537	4.3
Annual Retirement Payments for Retired Members and Beneficiaries	\$ 413,415,607	\$ 387,581,062	6.7
2. ASSETS AND LIABILITIES			
Total Actuarial Liability	\$ 8,590,033,174	\$ 8,128,956,346	5.7
Assets for Valuation Purposes	7,084,047,416	7,009,521,512	1.1
Unfunded Actuarial Liability	1,505,985,758	1,119,434,834	34.5
3. EMPLOYER CONTRIBUTION RATES AS A PERCENT OF PAYROLL			
Normal Cost	5.03%	5.00%	
Amortization of Unfunded Actuarial and Supplemental Liability	<u>2.66%</u>	<u>2.05%</u>	
Actuarial Contribution Rate	7.69%	7.05%	
Statutory Employer Contribution Rate*	<u>4.78%</u>	<u>4.58%</u>	

* Statutory Employer Contribution Rate exceeds last year's rate by the statutory rate increase limit of 0.2%. This rate does not include the 0.60% contribution rate for the Death and Disability Program.

SUMMARY OF PRINCIPAL RESULTS
KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM
(LOCAL)

	12/31/01	12/31/00	
	Valuation	Valuation	% Change
1. PARTICIPANT DATA			
Number of:			
Active Members	33,757	33,185	1.7 %
Retired Members and Beneficiaries	10,704	10,315	3.8
Inactive Members	<u>8,161</u>	<u>7,493</u>	8.9
Total Members	<u><u>52,622</u></u>	<u><u>50,993</u></u>	3.2
Projected Annual Salaries of Active Members	\$ 1,068,242,752	\$ 1,002,943,107	6.5
Annual Retirement Payments for Retired Members and Beneficiaries	\$ 73,591,887	\$ 68,600,599	7.3
2. ASSETS AND LIABILITIES			
Total Actuarial Liability	\$ 1,704,422,253	\$ 1,582,030,950	7.7
Assets for Valuation Purposes	1,519,102,089	1,491,671,811	1.8
Unfunded Actuarial Liability	185,320,164	90,359,139	105.1
3. EMPLOYER CONTRIBUTION RATES AS A PERCENT OF PAYROLL			
Normal Cost	3.61%	3.58%	
Amortization of Unfunded Actuarial and Supplemental Liability	<u>1.03%</u>	<u>0.55%</u>	
Actuarial Contribution Rate	4.64%	4.13%	
Statutory Employer Contribution Rate*	<u>3.22%</u>	<u>3.07%</u>	

* Statutory Employer Contribution Rate exceeds last year's rate by the statutory rate increase limit of 0.15%. This rate does not include the 0.60% contribution rate for the Death and Disability Program.

SUMMARY OF PRINCIPAL RESULTS
KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM
(TIAA)

	12/31/01	12/31/00	
	Valuation	Valuation	% Change
1. PARTICIPANT DATA			
Number of:			
Active Members	244	254	(3.9) %
Retired Members and Beneficiaries	746	784	(4.8)
Inactive Members	<u>123</u>	<u>104</u>	18.3
Total Members	<u><u>1,113</u></u>	<u><u>1,142</u></u>	(2.5)
Projected Annual Salaries of Active Members	\$ 441,338,688	\$ 422,346,523	4.5
Annual Retirement Payments for Retired Members and Beneficiaries	\$ 3,213,687	\$ 3,397,862	(5.4)
2. ASSETS AND LIABILITIES			
Total Actuarial Liability	\$ 38,234,985	\$ 38,565,852	(0.9)
Assets for Valuation Purposes	18,478,549	15,882,806	16.3
Unfunded Actuarial Liability	19,756,436	22,683,046	(12.9)
3. EMPLOYER CONTRIBUTION RATES AS A PERCENT OF PAYROLL			
Normal Cost	0.00%	0.00%	
Amortization of Unfunded Actuarial and Supplemental Liability	<u>2.65%</u>	<u>2.20%</u>	
Actuarial Contribution Rate	2.65%	2.20%	
Statutory Employer Contribution Rate*	<u>2.65%</u>	<u>2.20%</u>	

* Statutory Employer Contribution Rate is assumed to be equal to the Actuarial Rate excluding the contribution for the Death and Disability Program.

SUMMARY OF PRINCIPAL RESULTS

KANSAS POLICE AND FIREFIGHTER'S RETIREMENT SYSTEM

	12/31/01 Valuation	12/31/00 Valuation	% Change
1. PARTICIPANT DATA			
Number of:			
Active Members	6,405	6,258	2.3 %
Retired Members and Beneficiaries	3,211	3,031	5.9
Inactive Members	855	794	7.7
Total Members	10,471	10,083	3.8
Projected Annual Salaries of Active Members	\$ 297,722,078	\$ 278,546,723	6.9
Annual Retirement Payments for Retired Members and Beneficiaries	\$ 64,295,036	\$ 60,260,172	6.7
2. ASSETS AND LIABILITIES			
Total Actuarial Liability	\$ 1,318,343,709	\$ 1,300,093,439	1.4
Assets for Valuation Purposes	1,259,442,200	1,237,983,902	1.7
Unfunded Actuarial Liability	58,901,509	62,109,537	(5.2)
3. EMPLOYER CONTRIBUTION RATES AS A PERCENT OF PAYROLL			
Normal Cost	9.02%	6.40%	
Amortization of Unfunded Actuarial and Supplemental Liability	<u>0.45%</u>	<u>0.46%</u>	
Actuarial Contribution Rate (Local Employers)	9.47%	6.86%	
Statutory Employer Contribution Rate*	<u>9.47%</u>	<u>6.86%</u>	

* The Statutory Employer Contribution Rate is assumed to be equal to the Actuarial Rate. This is referred to as the "Uniform" rate, and varies for State and Local employers. The total contribution is equal to the appropriate uniform rate plus the payment required to amortize the unfunded past service liability, determined separately for each employer.

SUMMARY OF PRINCIPAL RESULTS

KANSAS RETIREMENT SYSTEM FOR JUDGES

	12/31/01 Valuation	12/31/00 Valuation	% Change
1. PARTICIPANT DATA			
Number of:			
Active Members	252	247	2.0 %
Retired Members and Beneficiaries	147	150	(2.0)
Inactive Members	18	14	28.6
Total Members	417	411	1.5
Projected Annual Salaries of Active Members	\$ 21,577,514	\$ 20,944,148	3.0
Annual Retirement Payments for Retired Members and Beneficiaries	\$ 4,256,204	\$ 4,121,129	3.3
2. ASSETS AND LIABILITIES			
Total Actuarial Liability	\$ 92,017,634	\$ 90,367,424	1.8
Assets for Valuation Purposes	81,847,643	80,121,808	2.2
Unfunded Actuarial Liability	10,169,991	10,245,616	(0.7)
3. EMPLOYER CONTRIBUTION RATES AS A PERCENT OF PAYROLL			
Normal Cost	14.68%	12.56%	
Amortization of Unfunded Actuarial and Supplemental Liability	<u>3.99%</u>	<u>4.11%</u>	
Actuarial Contribution Rate	18.67%	16.67%	
Statutory Employer Contribution Rate*	<u>18.67%</u>	<u>16.67%</u>	

* Statutory Employer Contribution Rate is assumed to be equal to the Actuarial Rate excluding the contribution for the Death and Disability Program.

SECTION 2

SCOPE OF THE REPORT

This report presents the actuarial valuation of the Kansas Public Employees Retirement System (KPERs) as of December 31, 2001. This valuation was requested by the System's Board.

Particular attention is called for in reading our cover letter, where the guidelines employed in the preparation of this report are outlined. We also comment on the sources and reliability of both the data and the actuarial assumptions upon which our findings are based. Those comments are the basis for our certification that this report is complete and accurate to the best of our knowledge and belief.

A summary of the findings resulting from this valuation is presented in the previous section. Section 3 describes the assets and investment experience of the System. Sections 4 and 5 describe how the obligations of the System are to be met under the actuarial cost method in use.

This report includes several appendices:

- Appendix A Schedules of valuation data classified by various categories of members.
- Appendix B A summary of the current benefit structure, as determined by the provisions of governing law on December 31, 2001.
- Appendix C A summary of the actuarial methods and assumptions used to estimate liabilities and determine contribution rates.
- Appendix D A glossary of actuarial terms.

SECTION 3

ASSETS

In many respects, an actuarial valuation can be thought of as an inventory process. The inventory is taken as of the actuarial valuation date, which for this valuation is December 31, 2001. On that date, the assets available for the payment of benefits are appraised. The assets are compared with the liabilities of the System, which are generally in excess of assets. The actuarial process thus leads to a method of determining the contributions needed by members and their employers in the future to balance the System assets and liabilities.

Market Value of Assets

The current market value represents the "snapshot" or "cash-out" value of System assets as of the valuation date. In addition, market values of assets provide a basis for measuring investment performance from time to time. At December 31, 2001 the market value of assets for the Retirement System was \$9.146 billion. Table 1 is a comparison, at market values, of System assets as of December 31, 2001, and December 31, 2000, in total and by investment category. Table 2 summarizes the change in the market value of assets from December 31, 2000 to December 31, 2001 by System.

Actuarial Value of Assets

Neither the market value of assets, representing a "cash-out" value of System assets, nor the book values of assets, representing the cost of investments, may be the best measure of the System's ongoing ability to meet its obligations.

To arrive at a suitable value for the actuarial valuation, a technique for determining the actuarial value of assets is used which dampens swings in the market value while still indirectly recognizing market values. The specific technique follows:

- | | |
|---------------|--|
| Step 1 | Determine the expected value of plan assets at the current valuation date using the actuarial assumption for investment return and the actual receipts and disbursements of the fund for the previous 12 months. |
| Step 2 | Subtract the expected value determined in Step 1 from the total market value of the Fund at the current valuation date. |
| Step 3 | Divide the difference between market and expected values determined in Step 2 by 3. |
| Step 4 | Add the expected value of Step 1 and the result of Step 3 to determine the actuarial value of assets. |

Table 3 shows the development of the actuarial value of assets (AVA) as of December 31, 2001, which was \$9.963 billion.

Due to the negative rate of return on the market value of assets from December 31, 2000 to December 31, 2001, the actuarial value exceeds the market value as of the valuation date.

TABLE 1
ANALYSIS OF NET ASSETS AT MARKET VALUE

	December 31, 2001		December 31, 2000	
	<u>Amount</u>	<u>% of</u>	<u>Amount</u>	<u>% of</u>
	(\$ Millions)	Total	(\$ Millions)	Total
Cash & Equivalents	\$ 507	5.5 %	\$ 234	2.3 %
Alternative Investments	487	5.2	478	4.8
Real Estate	657	7.1	594	5.9
Fixed Income	2,649	28.5	3,391	33.7
Domestic Equity Large Cap	2,394	25.8	2,419	24.1
International Equity	1,154	12.4	1,415	14.1
Domestic Equity Small Cap	1,431	15.5	1,521	15.1
	Subtotal \$ 9,279	100.0 %	\$ 10,052	100.0 %
Administrative Reserves	(14)		(14)	
Group Insurance and Optional Life Reserves	(119)		(164)	
NET ASSETS	\$ 9,146		\$ 9,874	

Allocation of Net Assets on December 31, 2001:

State/School	\$ 6,510
Local	1,395
TIAA	17
KP&F	1,150
Judges	75
Total Net Assets	\$ 9,146

TABLE 2
SUMMARY OF CHANGES IN KPERS ASSETS
DURING PERIOD ENDED DECEMBER 31, 2001

(Market Value)

	State/School	Local	TIAA	Total KPERS
Market Value of Assets as of January 1, 2001*	\$ 7,048,295,385	\$ 1,498,000,095	\$ 15,819,475	\$ 8,562,114,955
Contributions:				
Employee	134,169,330	43,165,142	0	177,334,472
Employer	141,479,926	28,692,565	5,597,767	175,770,258
Miscellaneous	122,428	2,225	0	124,653
Total Contributions	<u>275,771,684</u>	<u>71,859,932</u>	<u>5,597,767</u>	<u>353,229,383</u>
Total Investment Income	(347,249,919)	(73,767,925)	(816,084)	(421,833,928)
Total Income	<u>(71,478,235)</u>	<u>(1,907,993)</u>	<u>4,781,683</u>	<u>(68,604,545)</u>
Less Benefits:				
Retirement Benefits (Annuity)	(399,313,961)	(71,127,222)	(3,317,560)	(473,758,743)
Retirement Benefits (Lump Sum)	(32,717,999)	(14,397,754)	0	(47,115,753)
Retirant Dividends	(5,244,563)	(924,577)	(108,848)	(6,277,988)
Withdrawals	(20,298,751)	(11,079,159)	0	(31,377,910)
Death Benefits	(9,678,352)	(3,221,310)	(181,600)	(13,081,262)
Total Benefits	<u>(467,253,626)</u>	<u>(100,750,022)</u>	<u>(3,608,008)</u>	<u>(571,611,656)</u>
Net Increase in Assets	(538,731,861)	(102,658,015)	1,173,675	(640,216,201)
Market Value of Assets as of December 31, 2001*	\$ 6,509,563,524	\$ 1,395,342,080	\$ 16,993,150	\$ 7,921,898,754

* Note: Assets exclude insurance and administrative reserves.

**TABLE 2 (cont.)
SUMMARY OF CHANGES IN KPERS ASSETS
DURING PERIOD ENDED DECEMBER 31, 2001**

(Market Value)

	KPERS	KP&F	Judges	Total
Market Value of Assets as of January 1, 2001*	\$ 8,562,114,955	\$ 1,232,301,955	\$ 79,533,257	\$ 9,873,950,167
Contributions:				
Employee	177,334,472	20,293,850	1,047,240	198,675,562
Employer	175,770,258	27,949,144	2,910,598	206,630,000
Miscellaneous	124,653	42,235	0	166,888
Total Contributions	<u>353,229,383</u>	<u>48,285,229</u>	<u>3,957,838</u>	<u>405,472,450</u>
Total Investment Income	<u>(421,833,928)</u>	<u>(60,702,297)</u>	<u>(3,913,327)</u>	<u>(486,449,552)</u>
Total Income	(68,604,545)	(12,417,068)	44,511	(80,977,102)
Less Benefits:				
Retirement Benefits (Annuity)	(473,758,743)	(62,227,750)	(4,281,230)	(540,267,723)
Retirement Benefits (Lump Sum)	(47,115,753)	(3,489,416)	(528,221)	(51,133,390)
Retirant Dividends	(6,277,988)	(1,405,869)	(62,190)	(7,746,047)
Withdrawals	(31,377,910)	(2,711,752)	(22,482)	(34,112,144)
Death Benefits	(13,081,262)	(317,955)	(83,741)	(13,482,958)
Total Benefits	<u>(571,611,656)</u>	<u>(70,152,742)</u>	<u>(4,977,864)</u>	<u>(646,742,262)</u>
Net Increase in Assets	(640,216,201)	(82,569,810)	(4,933,353)	(727,719,364)
Market Value of Assets as of December 31, 2001*	\$ 7,921,898,754	\$ 1,149,732,145	\$ 74,599,904	\$ 9,146,230,803

* Note: Assets exclude insurance and administrative reserves.

TABLE 3
DEVELOPMENT OF ACTUARIAL VALUE OF NET ASSETS

	State / School	Local	TIAA	KP&F	Judges	Total KPERS
1. Actuarial Value of Assets as of December, 2000* :	\$7,009,521,512	\$1,491,671,811	\$15,882,806	\$1,237,983,902	\$80,121,808	\$9,835,181,839
2. Actual Receipts/Disbursements						
a. Total Contributions	275,771,684	71,859,932	5,597,767	48,285,229	3,957,838	405,472,450
b. Benefit Payments	(467,253,626)	(100,750,022)	(3,608,008)	(70,152,742)	(4,977,863)	(646,742,261)
c. Net Change	<u>(191,481,942)</u>	<u>(28,890,090)</u>	<u>1,989,759</u>	<u>(21,867,513)</u>	<u>(1,020,025)</u>	<u>(241,269,811)</u>
3. Expected Actuarial Value of Assets as of December 31, 2001:	7,371,289,362	1,580,982,094	19,221,249	1,314,297,228	85,471,512	10,371,261,445
4. Market Value as of December 31, 2001:	6,509,563,524	1,395,342,080	16,993,150	1,149,732,145	74,599,904	9,146,230,803
5. Difference Between Market and Expected Values:	(861,725,838)	(185,640,014)	(2,228,099)	(164,565,083)	(10,871,608)	(1,225,030,642)
6. Actuarial Value of Assets as of December 31, 2001* : (Expected + Difference/3):	\$7,084,047,416	\$1,519,102,089	\$18,478,549	\$1,259,442,200	\$81,847,643	\$9,962,917,897
6. Rate of Return on Actuarial Value of Assets**	3.85%	3.81%	3.59%	3.53%	3.45%	3.80%

* Note: Assets exclude insurance and administrative reserves.

** Annualized dollar-weighted rate of return shown

SECTION 4

SYSTEM LIABILITIES

In the previous section, an actuarial valuation was compared with an inventory process, and an analysis was given of the inventory of assets of the System as of the valuation date, December 31, 2001. In this section, the discussion will focus on the commitments of the System, which are referred to as its liabilities.

Table 4 contains an analysis of the actuarial present value of all future benefits (PVFB) for contributing members, inactive members, retirees and their beneficiaries. The analysis is provided for each group.

The liabilities summarized in Table 4 include the actuarial present value of all future benefits expected to be paid with respect to each member. For an active member, this value includes measures of both benefits already earned and future benefits to be earned. For all members, active and retired, the value extends over benefits earnable and payable for the rest of their lives and, if an optional benefit is chosen, for the lives of the surviving beneficiaries.

The actuarial assumptions used to determine liabilities are based on the results of the 2001 Triennial Experience Study, as shown in Appendix C. This set of assumptions was adopted by the Board in September 2001 and was first used for the December 31, 2000 valuation.

All liabilities reflect the benefit structure in place December 31, 2001.

Actuarial Liabilities

A fundamental principle in financing the liabilities of a retirement program is that the cost of its benefits should be related to the period in which benefits are earned, rather than to the period of benefit distribution. An actuarial cost method is a mathematical technique that allocates the present value of future benefits into annual costs. In order to do this allocation, it is necessary for the funding method to “breakdown” the present value of future benefits into two components:

- (1) that which is attributable to the past and
- (2) that which is attributable to the future.

Actuarial terminology calls the part attributable to the past the “past service liability” or the “actuarial liability”. The portion allocated to the future is known as the present value of future normal costs, with the specific piece of it allocated to the current year being called the “normal cost”. Table 5 contains the calculation of actuarial liabilities for all groups.

TABLE 4
KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM
PRESENT VALUE OF FUTURE BENEFITS (PVFB)
AS OF DECEMBER 31, 2001

	State / School	Local	TIAA	Total KPERS
1. Active employees				
a. Retirement Benefit	\$ 6,564,378,157	\$ 1,471,792,130	\$ 9,730,150	\$ 8,045,900,437
b. Pre-Retirement Death Benefit	104,308,128	43,017,514	527,972	147,853,614
c. Withdrawal Benefit	446,640,498	188,352,197	756,602	635,749,297
d. Disability Benefit	225,631,675	72,805,010	1,255,117	299,691,802
e. Total	<u>7,340,958,458</u>	<u>1,775,966,851</u>	<u>12,269,841</u>	<u>9,129,195,150</u>
2. Inactive Vested Members	216,619,225	70,721,110	1,827,425	289,167,760
3. Inactive Nonvested Members	37,672,353	12,256,832	0	49,929,185
4. Deferred Disabled Members	110,181,281	30,585,586	241,215	141,008,082
5. Retirees	3,538,735,229	581,176,005	21,346,769	4,141,258,003
6. Beneficiaries	133,639,012	42,436,550	2,545,240	178,620,802
7. Retirant Dividend Reserve	5,244,563	924,577	108,848	6,277,988
8. Unclaimed Account Reserve	<u>2,000,000</u>	<u>500,000</u>	<u>0</u>	<u>2,500,000</u>
9. Total PVFB	<u>\$ 11,385,050,121</u>	<u>\$ 2,514,567,511</u>	<u>\$ 38,339,338</u>	<u>\$ 13,937,956,970</u>

TABLE 4 (cont.)
KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM
PRESENT VALUE OF FUTURE BENEFITS (PVFB)
AS OF DECEMBER 31, 2001

	KP&F	Judges
1. Active employees		
a. Retirement Benefit	\$ 898,386,467	\$ 83,718,102
b. Pre-Retirement Death Benefit	23,430,897	2,550,452
c. Withdrawal Benefit	32,476,621	118,160
d. Disability Benefit	135,291,999	0
e. Total	<u>1,089,585,984</u>	<u>86,386,714</u>
2. Inactive Vested Members	24,523,708	2,114,885
3. Inactive Nonvested Members	8,535,222	45,435
4. Disabled Members	90,312,743	170,284
5. Retirees	479,786,668	29,101,652
6. Beneficiaries	59,335,762	7,247,483
7. Retirant Dividend Reserve	<u>1,405,870</u>	<u>62,190</u>
8. Total PVFB	<u>\$ 1,753,485,957</u>	<u>\$ 125,128,643</u>

TABLE 5
KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM
ACTUARIAL LIABILITIES
AS OF DECEMBER 31, 2001

	State / School	Local	TIAA	Total KPERS
1. Active employees				
a. Retirement Benefit	\$ 4,064,400,966	\$ 792,492,742	\$ 9,730,150	\$ 4,866,623,858
b. Pre-Retirement Death Benefit	64,920,486	24,069,492	527,972	89,517,950
c. Withdrawal Benefit	280,685,581	109,874,787	652,249	391,212,617
d. Disability Benefit	135,934,478	39,384,572	1,255,117	176,574,167
e. Total	<u>4,545,941,511</u>	<u>965,821,593</u>	<u>12,165,488</u>	<u>5,523,928,592</u>
2. Inactive Members	364,472,859	113,563,528	2,068,640	480,105,027
3. Retirees	3,538,735,229	581,176,005	21,346,769	4,141,258,003
4. Beneficiaries	133,639,012	42,436,550	2,545,240	178,620,802
5. Retirant Dividend Reserve	5,244,563	924,577	108,848	6,277,988
6. Unclaimed Account Reserve	<u>2,000,000</u>	<u>500,000</u>	<u>0</u>	<u>2,500,000</u>
7. Total Actuarial Liability	<u>\$ 8,590,033,174</u>	<u>\$ 1,704,422,253</u>	<u>\$ 38,234,985</u>	<u>\$ 10,332,690,412</u>

**TABLE 5 (cont.)
KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM
ACTUARIAL LIABILITIES
AS OF DECEMBER 31, 2001**

	KP&F	Judges
1. Total Present Value of Future Benefits	\$ 1,753,485,957	\$ 125,128,643
2. Present Value of Future Normal Cost	<u>435,142,248</u>	<u>33,111,009</u>
3. Total Actuarial Liability (1) - (2)	<u><u>\$ 1,318,343,709</u></u>	<u><u>\$ 92,017,634</u></u>

SECTION 5

EMPLOYER CONTRIBUTIONS

The previous two sections were devoted to a discussion of the assets and liabilities of the System. A comparison of Tables 3 and 4 indicates that current assets fall short of meeting the present value of future benefits (total liability). This is expected in all but a fully closed down fund, where no further contributions are anticipated.

In an active system, there will almost always be a difference between the actuarial value of assets and total liabilities. This deficiency has to be made up by future contributions and investment returns. An actuarial valuation sets out a schedule of future contributions that will deal with this deficiency in an orderly fashion.

The method used to determine the incidence of the contributions in various years is called the actuarial cost method. Under an actuarial cost method the contributions required to meet the difference between current assets and current liabilities are allocated each year between two elements: (1) the normal cost and (2) the unfunded actuarial liability contribution rate.

The term "fully funded" is often applied to a system in which contributions at the normal cost rate are sufficient to pay for the benefits of existing employees as well as for those of new employees. More often than not, systems are not fully funded, either because of past benefit improvements that have not been completely funded or because of actuarial deficiencies that have occurred because experience has not been as favorable as anticipated. Under these circumstances, an unfunded actuarial liability (UAL) exists.

Description of Rate Components

KPERS

The Projected Unit Credit actuarial cost method is used for KPERS. Under that method, the normal cost for any year is equal to the actuarial present value of the portion of the projected benefit that is allocated to the current year of service. The actuarial present value of benefits allocated to prior years is the actuarial liability. The unfunded actuarial liability represents the difference between the actuarial liability and the actuarial value of assets as of the valuation date. The unfunded actuarial liability is calculated each year and reflects experience gains/losses.

The KPERS Act provides for the calculation of separate employer contribution rates for three groups: the State/School rate (for all State and School employees covered by the regular KPERS provisions), the Local rate (for all other covered employers), and the TIAA rate (for a closed group of members with previous service in the Regents institutions).

Legislation provides that the employer rates of contribution recommended by the Board of Trustees for State Employers may not increase more than 0.2% each year and the rate for employers other than the State may not increase by more than 0.15%. Such limits on the increase in the statutory contribution rate do not apply to the increase in the employer contribution rate for benefit enhancements. Although not shown in these rates, the total contribution rates for KPERS employers include the statutory employer contribution to the KPERS Group Life Insurance Reserve of 0.6% of members' compensation.

The contribution rates based on this December 31, 2001 actuarial valuation will be used to determine employer contribution rates to the Kansas Public Employees Retirement System for fiscal years beginning in 2004. In this context, the term "contribution rate" means the percentage, which is applied to a particular active member payroll to determine the actual employer contribution amount (i.e., in dollars) for the group.

For KPERS, the unfunded actuarial liability is amortized over a period originally set at 40 years beginning July 1, 1993. The annual amortization payments will increase 4% for each year remaining in the 40-year amortization period. As a result, if total payroll grows 4% per year, as assumed, the amortization payment will remain level as a percentage of total current payroll. The increase in the unfunded actuarial liability resulting from the 1998 COLA is amortized as a level percent of payroll over 15 years.

For the closed group of KPERS-TIAA members, the unfunded actuarial liability is amortized by annual level dollar payments over a period of 10 years from July 1, 1993. This period was extended by one year, effective with the 1998 actuarial valuation.

KP&F

The actuarially determined contribution requirements for employers in KP&F are comprised of:

- (a) a "uniform" rate, determined separately for State and Local employers, as a percentage of payroll, plus
- (b) the payment required to amortize the unfunded past service liability or any 15% excess benefit liability, which is determined separately for each participating employer.

For employers who enter KP&F for future service only, the total cost is the uniform contribution rate.

The Aggregate Actuarial Cost Method with Supplemental Unfunded Actuarial Liability (UAL) is used for KP&F. This method develops a normal cost rate on a group, or aggregate, basis. The Supplemental Unfunded Liability was initially established in 1993 to reflect the increase in the actuarial liability (using the Projected Unit Credit cost method) due to the benefit enhancement package passed in that year. The Supplemental UAL is amortized over 40 years measured from July 1, 1993 with payments increasing 4% per year. A separate amortization base was established for the ad hoc COLA granted in 1998. This UAL is amortized over 15 years with the payment increasing 4% per year. As of December 31, 2000 the Supplemental UAL was re-established with the resulting UAL set to zero. The COLA UAL amortization base and payments remain unchanged.

Judges

The Frozen Entry Age Cost Method is used. The frozen unfunded actuarial liability (UAL) was established in 1993 with payments over 40 years as a level dollar amount. The UAL is frozen and reflects changes only due to a change in plan provisions or actuarial assumptions. Actuarial gains/losses are reflected in the calculation of the normal cost rate.

Contribution Rate Summary

In Table 6 the total actuarial contribution rates for KPERS, determined as of December 31, 2001, are presented. The contribution rates for employers who affiliated for prior service and are amortizing the payment of that liability over a period of years are shown in Table 7. The derivations of the contribution rates for the unfunded actuarial liability for the State/School, Local and TIAA groups are shown in Table 8. Table 9 shows the derivation of the employer contribution rates for the KP&F and Judges. Table 10 shows the KP&F individual employer contribution rates for fiscal years beginning in 2003 and 2004 while Table 11 shows the calculation of the additional contribution rate due to amortization of prior service UAL or excess benefit liability for fiscal years beginning in 2004.

The rates shown in this report, which are based on the actuarial assumptions and cost methods described in Appendix C, are applicable for determining employer contribution rates for fiscal years commencing in 2004.

TABLE 6
KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEMS
ACTUARIAL EMPLOYER CONTRIBUTION RATES
FISCAL YEAR COMMENCING IN 2004

	Retirement Benefits				Total*
	Total Normal Cost	Employee Normal Cost	Employer Normal Cost	Unfunded Actuarial Liability	
State / School **	9.03%	4.00%	5.03%	2.66%	7.69%
Local	7.61%	4.00%	3.61%	1.03%	4.64%
TIAA	0.00%	0.00%	0.00%	2.65%	2.65%
KP&F					
State Uniform Contribution Rate ***	15.60%	6.58%	9.02%	0.14%	9.16%
Local Uniform Contribution Rate ***	15.60%	6.58%	9.02%	0.45%	9.47%
Judges	19.45%	4.77%	14.68%	3.99%	18.67%

* Does not include the contribution to the Death and Disability Program.

** For Correctional Employees, contribution rates of 7.82% and 8.23% apply for normal retirement ages of 60 and 55, respectively.

*** The total contribution rate is equal to the appropriate uniform contribution rate plus the payment, if any, required to amortize the unfunded past service liability or the 15% excess benefit liability determined separately for each employer.

**TABLE 7
LOCAL AFFILIATION COST FACTORS
FOR FISCAL YEAR BEGINNING IN 2004**

Employer	Total Estimated 2002 Annual Payroll	1/1/2004 Unfunded Actuarial Liability **	Payment on 1/1/2004 Unfunded Liability	Payment on Unfunded Liability as a % of Payroll	Total Rate for Years Commencing in 2003*	Total Rate for Years Commencing in 2004*
St. Francis Housing Authority	\$10,838	\$7,138	\$404	3.44%	7.03%	6.66%
City of Burden	\$122,911	\$14,075	\$795	0.60%	3.81%	3.82%
City of Longton	\$54,972	\$17,114	\$968	1.63%	4.31%	4.85%
Bourbon County RWD#2	\$96,402	\$99,181	\$5,607	5.38%	8.61%	8.60%
Towanda Township	\$27,642	\$8,098	\$457	1.53%	4.60%	4.75%
Ness City Public Library	\$30,392	\$2,715	\$153	0.47%	3.56%	3.69%
City of Herndon	\$7,018	\$32,091	\$1,815	23.91%	24.03%	27.13%
Hays Housing Authority	\$29,478	\$1,602	\$92	0.29%	3.36%	3.51%
Haysville Community Library	\$99,700	\$180,171	\$10,182	9.44%	15.42%	12.66%
Hamilton County Library	\$24,691	\$11,932	\$675	2.53%	4.43%	5.75%
Ellis Public Library	\$8,974	\$4,530	\$256	2.64%	5.82%	5.86%
Bucklin Public Library	\$12,972	\$11,280	\$638	4.55%	7.35%	7.77%
Elkhart Cemetery District	\$29,221	\$1,596	\$91	0.29%	3.37%	3.51%
Clay County Conservation District	\$19,384	\$50,191	\$2,839	13.54%	15.78%	16.76%
City of Linn Valley	\$23,338	\$887	\$50	0.20%	3.27%	3.42%
City of Blue Mound	\$50,159	\$2,520	\$140	0.26%	3.60%	3.48%
Kansas Workers' Risk Coop for Counties	\$225,621	\$45,724	\$2,578	1.06%	4.17%	4.28%
Lindsborg Community Library	\$15,919	\$15,090	\$841	4.89%	7.96%	8.11%
City of North Newton	\$175,302	\$145,107	\$8,098	4.27%	7.34%	7.49%
City of Arcadia	\$75,964	\$14,189	\$791	0.96%	4.03%	4.18%
Four County Mental Health	\$3,227,549	\$1,628,441	\$127,125	3.64%	6.71%	6.86%
City of Salina	\$9,665,482	\$26,235	\$3,539	0.03%	3.10%	3.25%
Unified Government - Wyandotte Co./ KCK	\$39,758,218	\$543,385	\$72,708	0.17%	3.23%	3.39%
Total	\$53,792,146	\$2,863,292	\$240,845			

*Basic local employer contribution rates excluding Death and Disability contribution: FY 2003: 3.07% FY 2004: 3.22%

**Includes unfunded actuarial liability for prior service and for excess benefit liability

TABLE 8
KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM
DECEMBER 31, 2001 VALUATION
DERIVATION OF UNFUNDED ACTUARIAL LIABILITY RATES
FOR KPERS

	State / School	Local	TIAA	Total KPERS
1. Actuarial Accrued Liability	\$ 8,590,033,174	\$ 1,704,422,253	\$ 38,234,985	\$ 10,332,690,412
2. Actuarial Value of Assets	<u>7,084,047,416</u>	<u>1,519,102,089</u>	<u>18,478,549</u>	<u>8,621,628,054</u>
3. Unfunded Actuarial Liability	1,505,985,758	185,320,164	19,756,436	1,711,062,358
4. Payment to Amortize Unfunded Actuarial Liability	87,405,848	10,979,499	10,258,149	108,643,496
5. Total Projected Payroll	\$ 3,287,503,319	\$ 1,068,242,752	\$ 441,338,688	\$ 4,797,084,759
6. Amortization Payment as a Percent of Payroll	2.66%	1.03%	2.65% *	2.27%

* Projected to Fiscal Year End 2004

TABLE 9
KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEMS
DECEMBER 31, 2001 VALUATION
DERIVATION OF EMPLOYER CONTRIBUTION RATES
FOR KP&F AND JUDGES

	KP&F	Judges
1. Present Value of Future Benefits	\$ 1,753,485,957	\$ 125,128,643
2. Actuarial Value of Assets	1,259,442,200	81,847,643
3. 1998 COLA Unfunded Actuarial Liability	10,634,543	0
4. Unfunded Actuarial Liability	<u>48,266,965</u>	<u>10,169,991</u>
5. Present Value of Future Normal Cost	\$ 435,142,248	\$ 33,111,009
6. Present Value of Future Employee Contributions	<u>183,519,439</u>	<u>8,118,205</u>
7. Present Value of Future Employer Contributions	\$ 251,622,809	\$ 24,992,804
8. Present Value of Future Earnings	\$ 2,790,139,929	\$ 170,242,131
9. Employer Normal Cost Rate	9.02%	14.68%
10. 1998 COLA Unfunded Actuarial Liability Payment (Local Employers)	0.45%	--
11. Unfunded Actuarial Liability Payment	--	3.99%
12. Total Local Employer Actuarial Rate	9.47% *	18.67% **

* This is the Uniform Contribution Rate for Local Employers. For State Employers the Uniform rate is 9.16%. Individual employer contribution rates are developed in Tables 10 and 11.

** Does not include 0.4% for Group Insurance

TABLE 10
KP&F
EMPLOYER CONTRIBUTION RATES FOR FISCAL YEARS
COMMENCING IN CALENDAR YEARS 2003 AND 2004

Employer	Total Rate for Fiscal Year Commencing in 2003	Recommended Total Rate for Fiscal Year Commencing in 2004
Douglas County Law Enforcement	10.33 %	12.97 %
Ford County	6.86	9.47
Franklin County Sheriff's Dept	13.13	15.30
Gray County Sheriff's Dept.	6.86	9.47
Harvey County Sheriff's Dept.	8.92	11.53
Johnson County Fire Dept.	6.86	9.47
Johnson County Fire No. 1	6.86	9.47
Johnson County Fire No. 2	6.86	9.47
Johnson County Park Commission	6.86	9.47
Johnson County Sheriff's Dept.	7.14	9.73
Labette County Sheriff's Dept.	10.17	12.65
Reno County Sheriff's Dept.	6.86	9.47
Riley County Law Enforcement	6.86	9.47
Sedgwick County Fire No. 1	7.27	9.88
Sedgwick County Sheriff's Dept.	7.15	9.74
Sedgwick County EMT's	7.40	9.98
Shawnee County Sheriff's Dept.	10.20	12.63
Sumner County Sheriff's Dept.	9.66	11.64
Unified Gov't of Wyandotte County	6.86	9.47
Unified Gov't of Wyandotte Co. - KCK	13.05	15.57
City of Abilene	6.86	9.47
City of Arkansas City	9.32	11.81
City of Atchison	8.74	11.13
City of Bonner Springs	6.86	9.47
City of Chanute	7.77	10.40
City of Cimarron	6.86	9.47
City of Coffeyville	13.83	15.83
City of Concordia	14.02	14.09
City of Derby	7.66	10.24
City of Dodge City	16.39	18.64
City of Emporia	10.36	12.57
City of Erie	6.86	9.47
City of Eudora	6.86	9.47
City of Fairway	7.50	10.07
City of Fort Scott	14.16	15.72

TABLE 10 (cont.)

KP&F
EMPLOYER CONTRIBUTION RATES FOR FISCAL YEARS
COMMENCING IN CALENDAR YEARS 2003 AND 2004

Employer	Total Rate for Fiscal Year Commencing in 2003	Recommended Total Rate for Fiscal Year Commencing in 2004
City of Herington	8.08 %	10.65 %
City of Hutchinson	13.92	16.37
City of Junction City	7.92	10.45
City of Lawrence	7.45	10.02
City of Leavenworth	7.46	10.02
City of Leawood	7.82	10.33
City of Lenexa	7.02	9.63
City of Manhattan	10.48	12.66
City of Merriam	7.50	10.02
City of McPherson	7.20	9.79
City of Mission	6.86	9.47
City of Newton EMTs	8.13	10.97
City of Newton	7.95	10.54
City of Olathe	6.95	9.56
City of Ottawa	6.86	9.47
City of Parsons	12.95	14.83
City of Pittsburg	10.78	13.16
City of Salina	10.71	12.98
City of Shawnee	7.50	10.03
City of Topeka	13.48	15.75
City of Wellington	10.82	13.30
City of Westwood	6.86	9.47
City of Winfield	11.27	13.88
Board of Regents Campus Police	6.55	9.16
Kansas Bureau of Investigation	7.57	10.08
Kansas Highway Patrol	8.69	11.15
Cowley County Sheriff's Dept	10.41	12.64
City of Gardner Public Safety Officers	6.86	9.47
City of Liberal Police & Firemen	6.86	9.47
City of Oswego	6.86	9.47
Leavenworth County	6.86	9.47
Pottawatomie County	6.86	9.47
City of Roeland Park	6.86	9.47
City of Edwardsville	10.35	13.09
City of Garden City	6.86	9.47
City of Lake Quivira	6.86	9.47

TABLE 10 (cont.)
KP&F

**EMPLOYER CONTRIBUTION RATES FOR FISCAL YEARS
COMMENCING IN CALENDAR YEARS 2003 AND 2004**

Employer	Total Rate for Fiscal Year Commencing in 2003	Recommended Total Rate for Fiscal Year Commencing in 2004
City of Paola	6.86	9.47
City of Winfield (EMS)	15.39	18.34

TABLE 11
KP&F EMPLOYER ADDITIONAL CONTRIBUTION RATES
FOR FISCAL YEARS BEGINNING IN 2004

Employer	Number of Employees	Total Estimated Annual Payroll	Excess Benefit Liability	Payment on Excess Benefit Liability	Unfunded Prior Service Liability	Payment on Unfunded Liability*	Total Payment Amount	As Percent of Payroll
Douglas County Law Enforcement	116	4,789,677	0	0	1,845,005	174,300	174,300	3.50 %
Ford County	69	2,184,682	0	0	0	0	0	0.00
Franklin County Sheriff's Dept	38	1,413,152	0	0	864,226	85,769	85,769	5.83
Gray County Sheriff's Dept.	5	199,719	0	0	0	0	0	0.00
Harvey County Sheriff's Dept.	32	1,075,343	0	0	39,687	23,100	23,100	2.06
Johnson County Fire Dept.	146	7,421,434	0	0	0	0	0	0.00
Johnson County Fire No. 1	12	497,706	0	0	0	0	0	0.00
Johnson County Fire No. 2	62	3,765,951	0	0	0	0	0	0.00
Johnson County Park Commission	16	705,010	0	0	0	0	0	0.00
Johnson County Sheriff's Dept.	402	24,105,107	0	0	509,985	65,200	65,200	0.26
Labette County Sheriff's Dept.	17	481,869	0	0	195,583	15,956	15,956	3.18
Reno County Sheriff's Dept.	55	2,184,146	0	0	0	0	0	0.00
Riley County Law Enforcement	92	3,796,714	0	0	0	0	0	0.00
Sedgwick County Fire No. 1	128	6,056,160	0	0	54,346	25,600	25,600	0.41
Sedgwick County Sheriff's Dept.	461	18,425,941	1,137	145	472,666	52,300	52,445	0.27
Sedgwick County EMT's	123	5,626,581	0	0	223,693	30,000	30,000	0.51
Shawnee County Sheriff's Dept.	108	4,529,953	0	0	1,531,940	149,000	149,000	3.16
Sumner County Sheriff's Dept.	15	495,957	0	0	109,022	11,200	11,200	2.17
Unified Gov't of Wyandotte County	779	3,567,399	0	0	0	0	0	0.00
Unified Gov't of Wyandotte Co. - KCK (incl.)		36,971,223	1,557,912	201,790	6,977,735	2,151,100	2,352,890	6.10
City of Abilene	21	789,930	0	0	0	0	0	0.00
City of Arkansas City	48	1,937,274	0	0	152,789	47,100	47,100	2.34
City of Atchison	43	1,597,296	0	0	89,541	27,600	27,600	1.66
City of Bonner Springs	24	1,055,636	0	0	0	0	0	0.00
City of Chanute	35	1,367,169	0	0	51,864	13,200	13,200	0.93
City of Cimarron	3	111,991	0	0	0	0	0	0.00

TABLE 11 (cont.)
KP&F EMPLOYER ADDITIONAL CONTRIBUTION RATES
FOR FISCAL YEARS BEGINNING IN 2004

Employer	Number of Employees	Total Estimated Annual Payroll	Excess Benefit Liability	Payment on Excess Benefit Liability	Unfunded Prior Service Liability	Payment on Unfunded Liability*	Total Payment Amount	As Percent of Payroll
City of Coffeyville	44	1,776,224	0	0	996,693	117,600	117,600	6.36 %
City of Concordia	8	249,524	0	0	101,630	12,000	12,000	4.62
City of Derby	34	1,415,119	0	0	108,523	11,400	11,400	0.77
City of Dodge City	59	2,171,165	0	0	2,283,307	207,300	207,300	9.17
City of Emporia	97	4,175,102	0	0	1,099,291	134,772	134,772	3.10
City of Erie	5	125,001	0	0	0	0	0	0.00
City of Eudora	7	273,685	0	0	0	0	0	0.00
City of Fairway	8	433,424	0	0	8,764	2,700	2,700	0.60
City of Fort Scott	34	1,083,980	0	0	597,627	70,500	70,500	6.25
City of Herington	8	236,004	0	0	23,656	2,900	2,900	1.18
City of Hutchinson	152	6,436,687	0	0	4,948,894	462,500	462,500	6.90
City of Junction City	97	3,535,529	0	0	116,533	35,900	35,900	0.98
City of Lawrence	248	13,139,307	0	0	243,985	75,200	75,200	0.55
City of Leavenworth	115	4,876,078	31,398	4,004	147,437	23,900	27,904	0.55
City of Leawood	98	5,108,114	0	0	436,842	45,900	45,900	0.86
City of Lenexa	144	8,521,034	0	0	103,591	13,900	13,900	0.16
City of Manhattan	65	2,493,523	0	0	425,395	82,900	82,900	3.19
City of Merriam	43	2,389,797	0	0	120,082	13,700	13,700	0.55
City of McPherson	44	1,735,022	0	0	18,729	5,800	5,800	0.32
City of Mission	22	1,021,965	0	0	0	0	0	0.00
City of Newton EMTs	11	485,427	0	0	76,812	7,600	7,600	1.50
City of Newton	60	2,434,611	0	0	87,888	27,100	27,100	1.07
City of Olathe	243	14,334,661	0	0	93,242	13,200	13,200	0.09
City of Ottawa	42	1,715,205	0	0	0	0	0	0.00
City of Parsons	41	1,349,232	0	0	244,234	75,300	75,300	5.36
City of Pittsburg	71	2,539,298	0	0	827,244	97,600	97,600	3.69
City of Salina	167	6,971,105	162,305	22,179	1,977,432	233,300	255,479	3.51

TABLE 11 (cont.)
KP&F EMPLOYER ADDITIONAL CONTRIBUTION RATES
FOR FISCAL YEARS BEGINNING IN 2004

Employer	Number of Employees	Total Estimated Annual Payroll	Excess Benefit Liability	Payment on Excess Benefit Liability	Unfunded Prior Service Liability	Payment on Unfunded Liability*	Total Payment Amount	As Percent of Payroll
City of Shawnee	124	6,968,418	158,112	21,551	168,601	19,900	41,451	0.56 %
City of Topeka	531	25,097,066	484,440	64,501	13,826,866	1,577,100	1,641,601	6.28
City of Wellington	33	1,360,459	0	0	460,287	54,300	54,300	3.83
City of Westwood	8	411,585	0	0	0	0	0	0.00
City of Winfield	42	1,815,863	0	0	774,474	83,400	83,400	4.41
Board of Regents Campus Police	130	5,150,297	0	0	0	0	0	0.00
Kansas Bureau of Investigation	88	4,438,720	0	0	180,697	42,600	42,600	0.92
Kansas Highway Patrol	432	20,733,138	0	0	1,824,631	430,100	430,100	1.99
Cowley County Sheriff's Dept	34	1,081,683	0	0	430,192	35,698	35,698	3.17
City of Gardner Public Safety Officers	21	956,173	0	0	0	0	0	0.00
City of Liberal Police & Firemen	52	2,054,252	0	0	0	0	0	0.00
City of Oswego	5	140,928	0	0	0	0	0	0.00
Leavenworth County	52	2,088,439	0	0	0	0	0	0.00
Pottawatomie County	19	643,939	0	0	0	0	0	0.00
City of Roeland Park	15	683,976	0	0	0	0	0	0.00
City of Edwardsville	15	483,400	0	0	236,426	18,237	18,237	3.62
City of Garden City	0	0	0	0	0	0	0	0.00
City of Lake Quivira	0	0	0	0	0	0	0	0.00
City of Paola	0	0	0	0	0	0	0	0.00
City of Winfield (EMS)	8	413,204	0	0	462,052	38,158	38,158	8.87
Total	6,426	\$ 300,700,383	\$ 2,395,304	\$ 314,170	\$ 46,570,139	\$ 6,943,890	\$ 7,258,060	

* Payments are based on a remaining 40-year amortization periods, except for Harvey County Sheriff's Department (20 years) and Sedgwick County EMTs (30 years).
 Payments for excess benefit liability are based on a remaining 15 year amortization period.

**APPENDIX A
SUMMARY OF MEMBERSHIP DATA**

KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEMS
ACTIVE MEMBER DATA

	12/31/01	12/31/00
State/School		
Number	105,252	103,647
Average Current Age	44.48	44.21
Average Service	10.58	10.51
Average Pay	\$31,235	\$30,409
 Local		
Number	33,757	33,185
Average Current Age	44.20	44.08
Average Service	9.01	8.94
Average Pay	\$31,645	\$30,223
 TIAA		
Number *	244	254
Average Current Age	50.46	49.87
Average Service	9.39	9.10
Average Pay	NA	NA
* Reflects Group A and Group B.		
 KPERS Total		
Number	139,253	137,086
Average Current Age	44.42	44.19
Average Service	10.20	10.13
Average Pay	\$31,279	\$30,307

**APPENDIX A
SUMMARY OF MEMBERSHIP DATA**

KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEMS
ACTIVE MEMBER DATA

	12/31/01	12/31/00
KP&F		
Number	6,405	6,258
Tier I	829	871
Tier II	5,576	5,387
Average Current Age	38.30	38.10
Average Service	10.56	10.40
Average Pay	\$46,483	\$44,511
 Judges		
Number	252	247
Average Current Age	54.36	54.22
Average Service	10.51	10.75
Average Pay	\$85,625	\$84,794
 System Total		
Number	145,910	143,591
Average Current Age	44.17	43.94
Average Service	10.21	10.14
Average Pay	\$32,041	\$31,020
 KP&F		
	<u>12/31/01</u>	
Social Security Coverage	<u>Yes</u>	<u>No</u>
Police	3,229	975
Fire	1,051	877
Medical	262	11
Total Number	4,542	1,863
Percentage	70.9%	29.1%

**APPENDIX A
SUMMARY OF MEMBERSHIP DATA**

KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEMS
INACTIVE MEMBER DATA

	12/31/01	12/31/00
State / School	28,899	27,077
Local	8,161	7,493
TIAA	<u>115</u>	<u>97</u>
KPERS Total	37,175	34,667
KP&F	855	794
Judges	<u>18</u>	<u>14</u>
System Total	38,048	35,475

**APPENDIX A
SUMMARY OF MEMBERSHIP DATA**

KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEMS
RETIREE AND BENEFICIARY MEMBER DATA

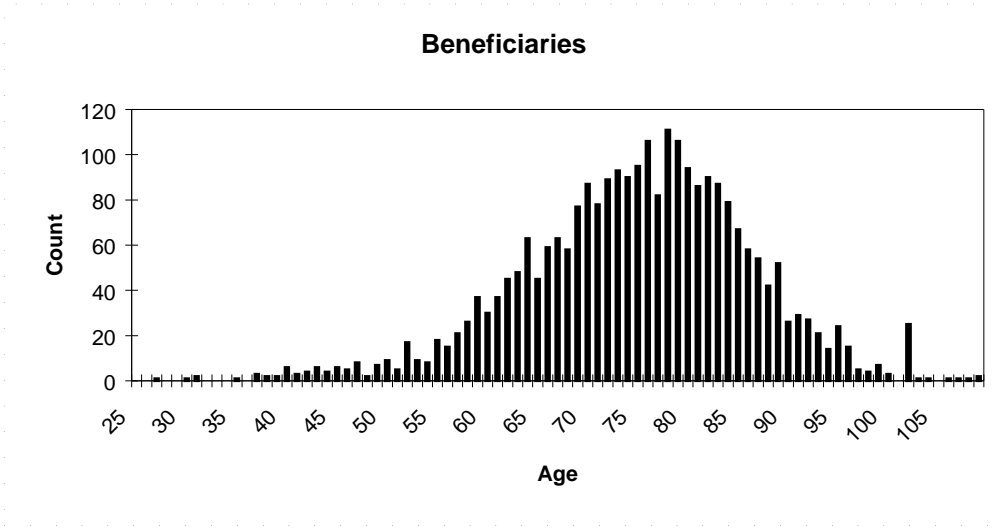
	12/31/01	12/31/00
State/School & Local		
Number	52,011	50,431
Average Benefit	\$9,364	\$9,046
Average Age	73.18	73.36
TIAA		
Number	746	784
Average Benefit	\$4,308	\$4,334
Average Age	78.72	78.24
KPERS Total		
Number	52,757	51,215
Average Benefit	\$9,292	\$8,974
Average Age	73.26	73.43
KP&F		
Number	3,211	3,031
Average Benefit	\$20,023	\$19,881
Average Age	68.30	67.30
Judges		
Number	147	150
Average Benefit	\$28,954	\$27,474
Average Age	73.50	74.10
System Total		
Number	56,115	54,396
Average Benefit	\$9,958	\$9,632
Average Age	72.97	73.09

**KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEMS
DISTRIBUTION OF RETIREES AND BENEFICIARIES
as of December 31, 2001**

STATE/SCHOOL



Count: 38,669 Average age: 73.1 Average benefit: \$ 10,236

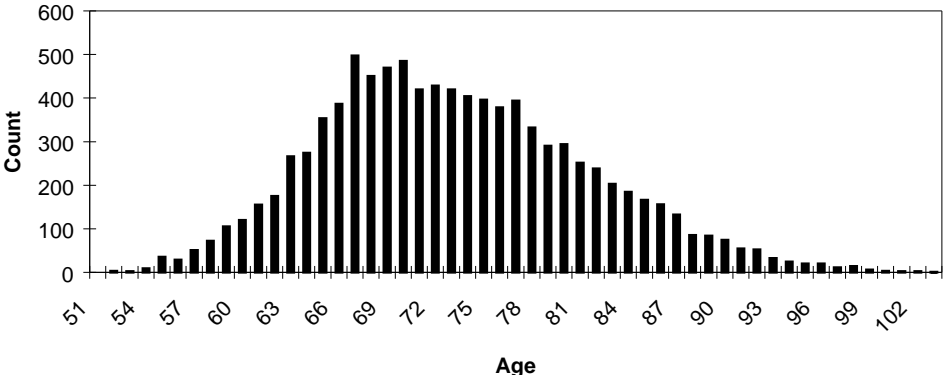


Count: 2,638 Average age: 75.4 Average benefit: \$ 6,665

**KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEMS
DISTRIBUTION OF RETIREES AND BENEFICIARIES
as of December 31, 2001**

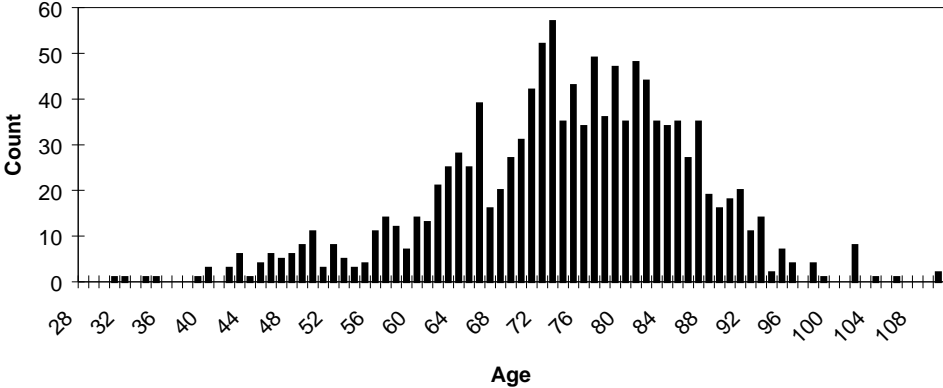
LOCAL

Retirees



Count: 9,505 Average age: 73.2 Average benefit: \$ 7,154

Beneficiaries

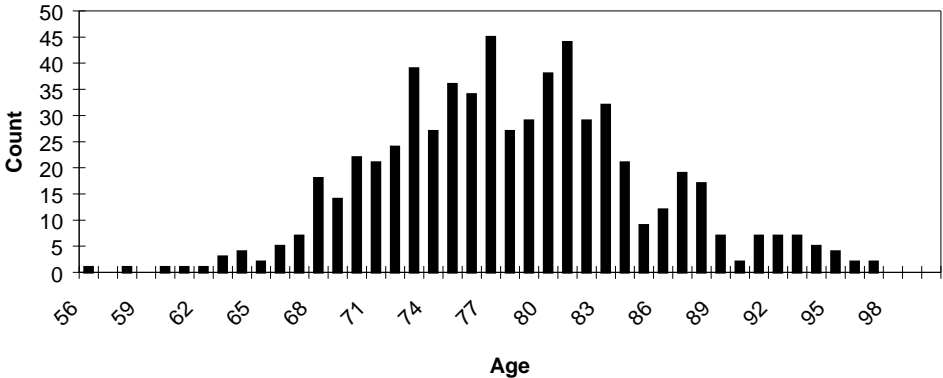


Count: 1,200 Average age: 74.3 Average benefit: \$ 4,668

**KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEMS
DISTRIBUTION OF RETIREES AND BENEFICIARIES**
as of December 31, 2001

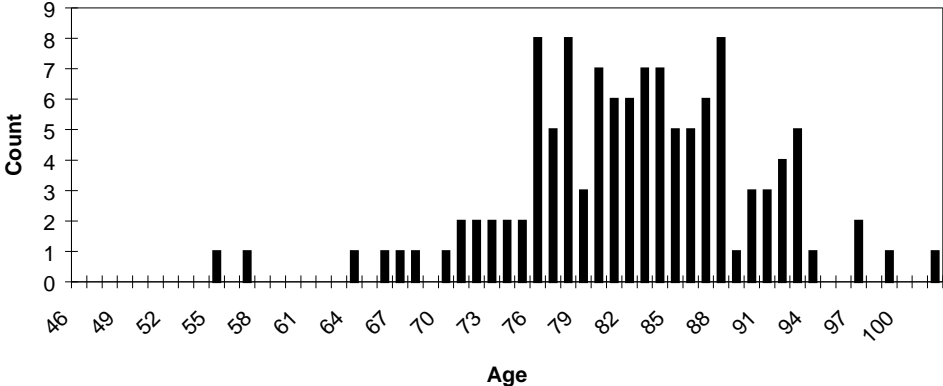
TIAA

Retirees



Count: 625 Average age: 78.1 Average benefit: \$ 4,000

Beneficiaries

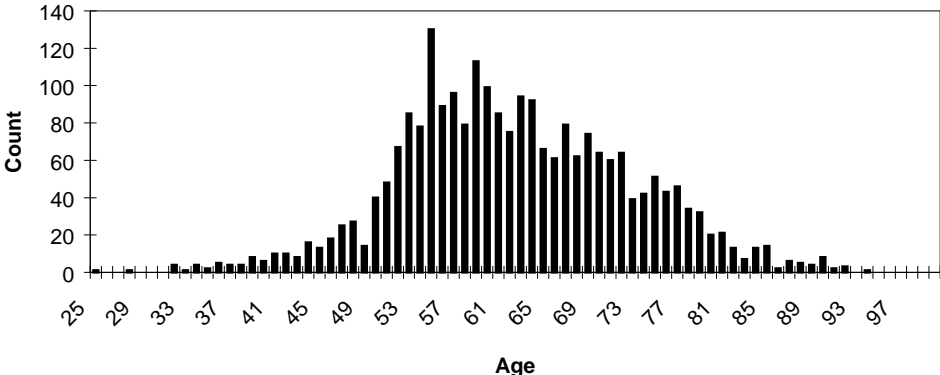


Count: 121 Average age: 81.9 Average benefit: \$ 3,496

**KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEMS
DISTRIBUTION OF RETIREES AND BENEFICIARIES
as of December 31, 2001**

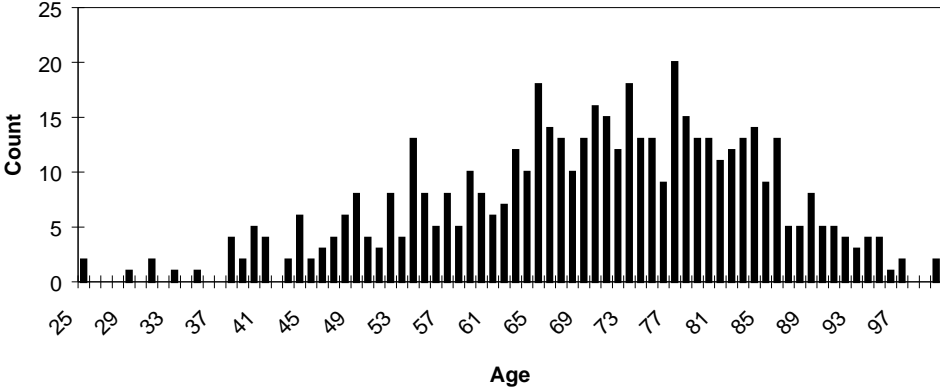
KP&F

Retirees



Count: 2,388 Average age: 62.4 Average benefit: \$ 23,455

Beneficiaries



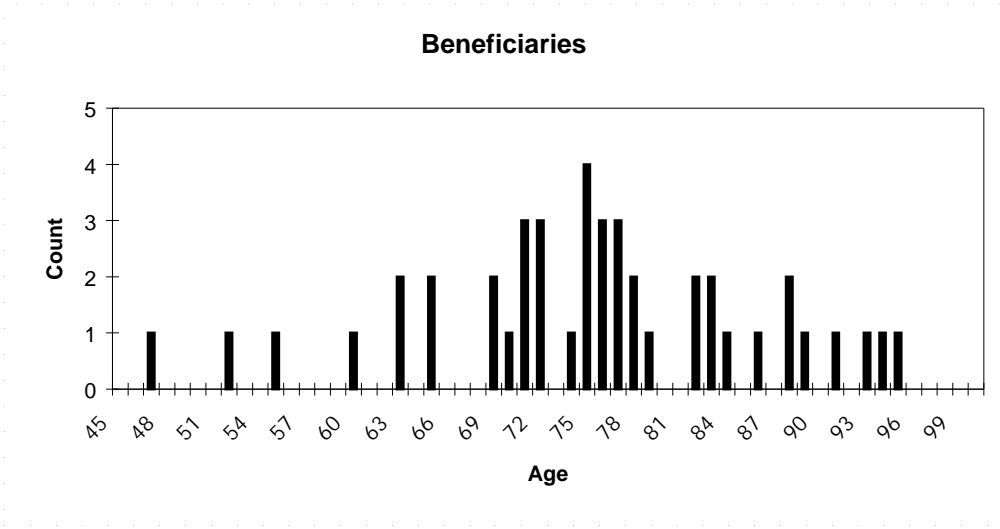
Note: 199 beneficiaries age 15 or under not shown on graph
 Count: 823 Average non-child age: 69.1 Average benefit: \$10,065

**KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEMS
DISTRIBUTION OF RETIREES AND BENEFICIARIES
as of December 31, 2001**

JUDGES



Count: 102 Average age: 72.2 Average benefit: \$ 32,796



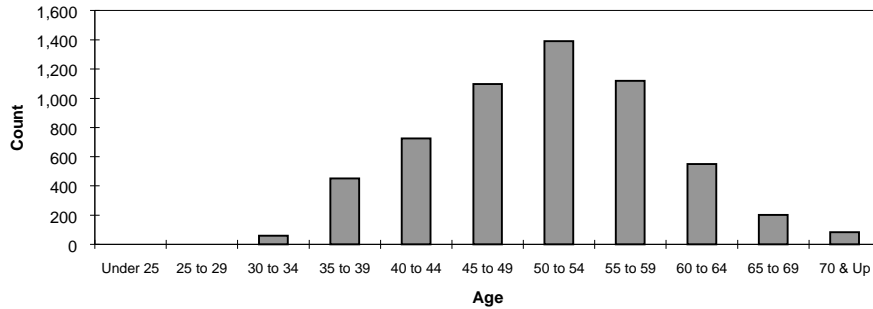
Count: 45 Average age: 75.9 Average benefit: \$ 20,892

**KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEMS
 DISTRIBUTION OF INACTIVE VESTED MEMBERS
 as of December 31, 2001**

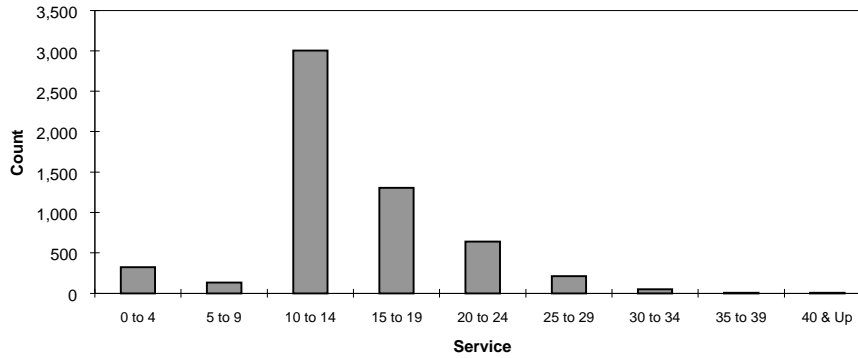
STATE/SCHOOL

Age	Service									Total
	0 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 & Up	
Under 25	0	0	0	0	0	0	0	0	0	0
25 to 29	0	0	0	0	0	0	0	0	0	0
30 to 34	4	1	55	0	0	0	0	0	0	60
35 to 39	6	6	406	32	0	0	0	0	0	450
40 to 44	11	10	487	184	33	1	0	0	0	726
45 to 49	13	5	635	276	157	10	0	0	0	1,096
50 to 54	22	9	676	363	214	90	15	0	0	1,389
55 to 59	40	13	501	303	156	92	10	1	1	1,117
60 to 64	118	49	182	110	62	11	14	2	2	550
65 to 69	72	27	40	29	15	6	10	3	0	202
70 & Up	37	14	19	8	3	1	0	0	2	84
Total	323	134	3,001	1,305	640	211	49	6	5	5,674

Age Distribution



Service Distribution



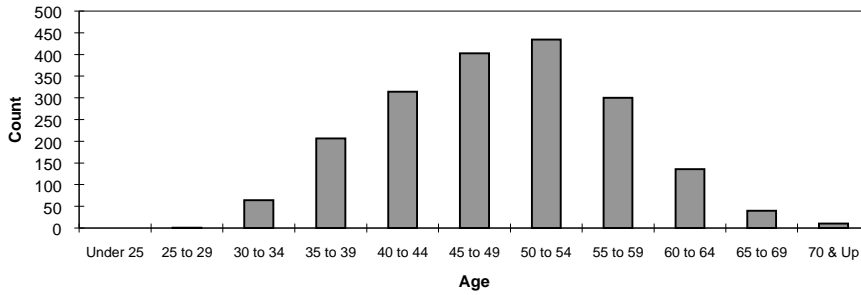
Nonvested: 21,173

**KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEMS
 DISTRIBUTION OF INACTIVE VESTED MEMBERS
 as of December 31, 2001**

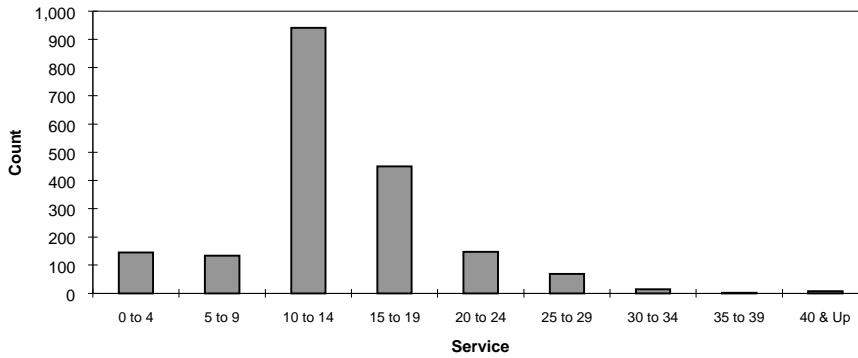
LOCAL

Age	Service									Total
	0 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 & Up	
Under 25	0	0	0	0	0	0	0	0	0	0
25 to 29	1	0	0	0	0	0	0	0	0	1
30 to 34	20	19	24	1	0	0	0	0	0	64
35 to 39	34	22	119	31	0	0	0	0	0	206
40 to 44	29	28	167	69	20	1	0	0	0	314
45 to 49	28	26	192	102	41	13	1	0	0	403
50 to 54	16	21	212	115	40	26	4	0	0	434
55 to 59	8	9	136	88	36	15	6	0	2	300
60 to 64	6	8	65	33	8	9	4	2	1	136
65 to 69	1	0	22	9	1	4	0	0	3	40
70 & Up	1	0	4	2	1	0	0	0	2	10
Total	144	133	941	450	147	68	15	2	8	1,908

Age Distribution



Service Distribution



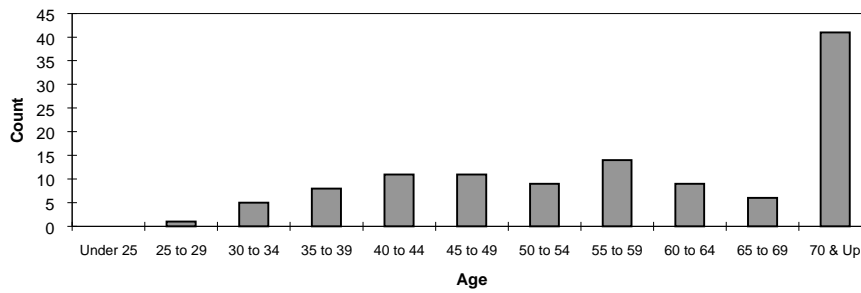
Nonvested: 5,568

**KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEMS
DISTRIBUTION OF INACTIVE VESTED MEMBERS
as of December 31, 2001**

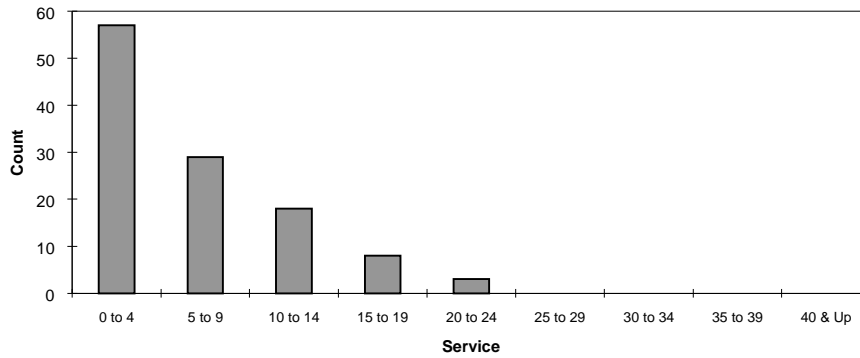
TIAA

Age	Service									Total
	0 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 & Up	
Under 25	0	0	0	0	0	0	0	0	0	0
25 to 29	1	0	0	0	0	0	0	0	0	1
30 to 34	5	0	0	0	0	0	0	0	0	5
35 to 39	5	3	0	0	0	0	0	0	0	8
40 to 44	4	4	2	1	0	0	0	0	0	11
45 to 49	6	1	2	1	1	0	0	0	0	11
50 to 54	5	1	2	1	0	0	0	0	0	9
55 to 59	4	3	1	4	2	0	0	0	0	14
60 to 64	6	1	2	0	0	0	0	0	0	9
65 to 69	3	1	2	0	0	0	0	0	0	6
70 & Up	18	15	7	1	0	0	0	0	0	41
Total	57	29	18	8	3	0	0	0	0	115

Age Distribution



Prior Service Distribution



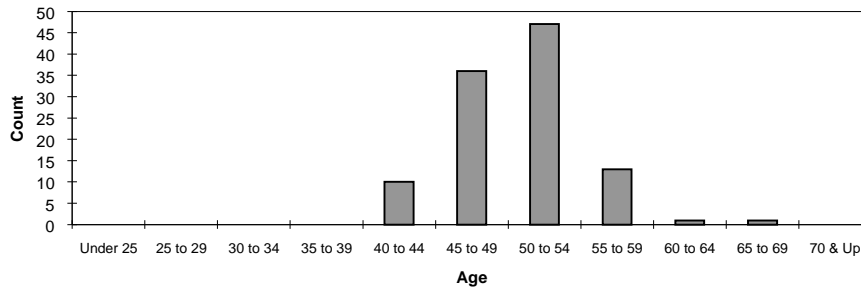
Nonvested: 0

**KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEMS
 DISTRIBUTION OF INACTIVE VESTED MEMBERS
 as of December 31, 2001**

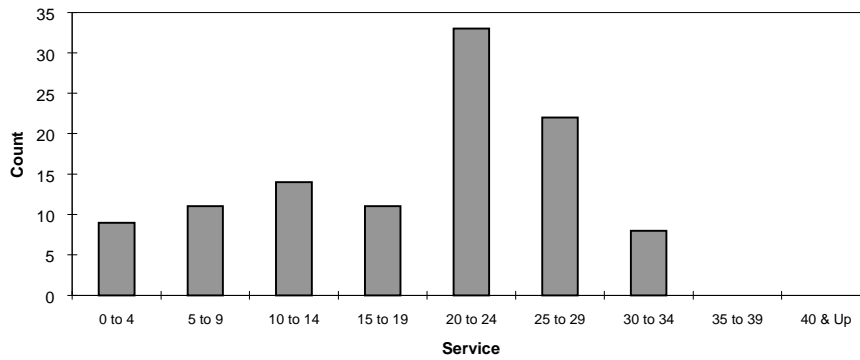
KP&F

Age	Service									Total
	0 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 & Up	
Under 25	0	0	0	0	0	0	0	0	0	0
25 to 29	0	0	0	0	0	0	0	0	0	0
30 to 34	0	0	0	0	0	0	0	0	0	0
35 to 39	0	0	0	0	0	0	0	0	0	0
40 to 44	0	1	4	3	1	1	0	0	0	10
45 to 49	0	4	5	4	19	4	0	0	0	36
50 to 54	6	4	5	3	10	15	4	0	0	47
55 to 59	3	2	0	1	3	1	3	0	0	13
60 to 64	0	0	0	0	0	1	0	0	0	1
65 to 69	0	0	0	0	0	0	1	0	0	1
70 & Up	0	0	0	0	0	0	0	0	0	0
Total	9	11	14	11	33	22	8	0	0	108

Age Distribution



Service Distribution



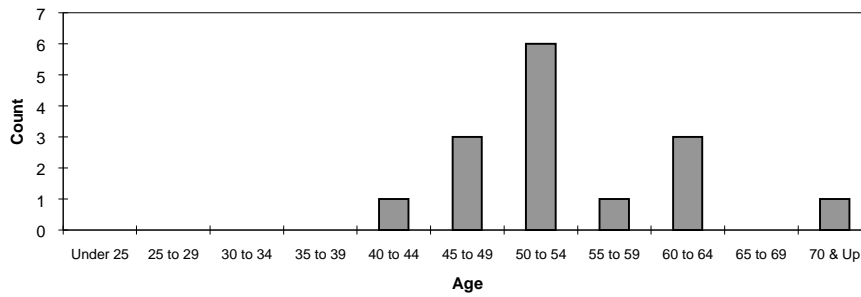
Nonvested: 747

**KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEMS
DISTRIBUTION OF INACTIVE VESTED MEMBERS
as of December 31, 2001**

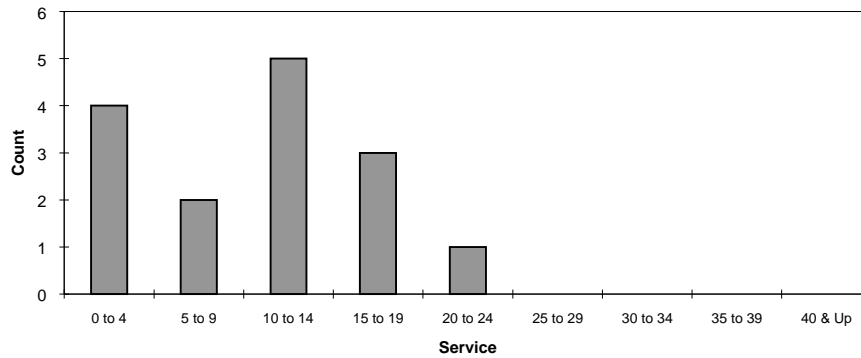
JUDGES

Age	Service									Total
	0 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 & Up	
Under 25	0	0	0	0	0	0	0	0	0	0
25 to 29	0	0	0	0	0	0	0	0	0	0
30 to 34	0	0	0	0	0	0	0	0	0	0
35 to 39	0	0	0	0	0	0	0	0	0	0
40 to 44	1	0	0	0	0	0	0	0	0	1
45 to 49	1	0	2	0	0	0	0	0	0	3
50 to 54	1	1	0	3	1	0	0	0	0	6
55 to 59	0	0	1	0	0	0	0	0	0	1
60 to 64	0	1	2	0	0	0	0	0	0	3
65 to 69	0	0	0	0	0	0	0	0	0	0
70 & Up	1	0	0	0	0	0	0	0	0	1
Total	4	2	5	3	1	0	0	0	0	15

Age Distribution



Service Distribution



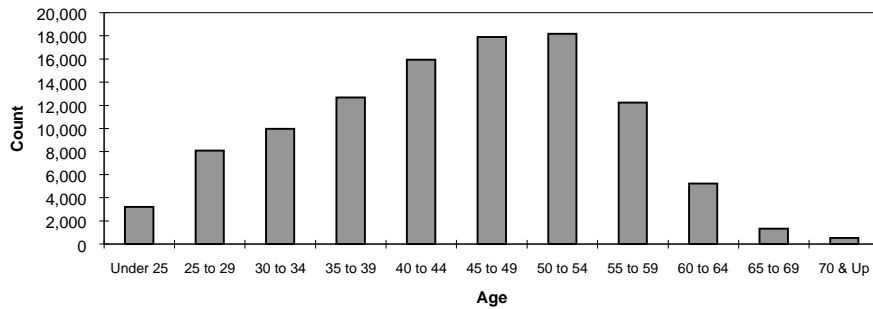
Nonvested: 3

**KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEMS
DISTRIBUTION OF ACTIVE MEMBERS
as of December 31, 2001**

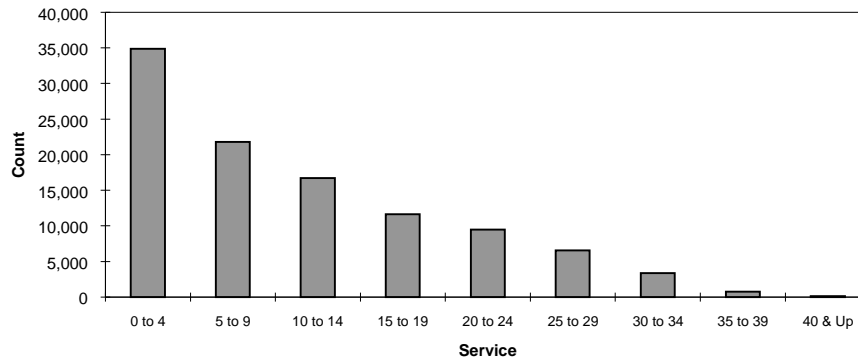
STATE/SCHOOL

Age	Service									Total
	0 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 & Up	
Under 25	3,184	25	0	0	0	0	0	0	0	3,209
25 to 29	6,576	1,487	11	0	0	0	0	0	0	8,074
30 to 34	4,771	4,055	1,125	27	0	0	0	0	0	9,978
35 to 39	5,146	2,998	3,240	1,254	59	0	0	0	0	12,697
40 to 44	5,024	3,633	2,733	2,815	1,667	52	0	0	0	15,924
45 to 49	4,132	3,719	3,258	2,257	2,917	1,592	35	0	0	17,910
50 to 54	2,914	2,909	3,265	2,503	2,227	2,834	1,485	21	0	18,158
55 to 59	1,779	1,688	1,914	1,829	1,720	1,449	1,459	374	13	12,225
60 to 64	820	841	867	738	766	486	319	331	71	5,239
65 to 69	343	284	216	154	111	88	54	32	36	1,318
70 & Up	172	141	67	52	28	29	11	8	12	520
Total	34,861	21,780	16,696	11,629	9,495	6,530	3,363	766	132	105,252

Age Distribution



Service Distribution

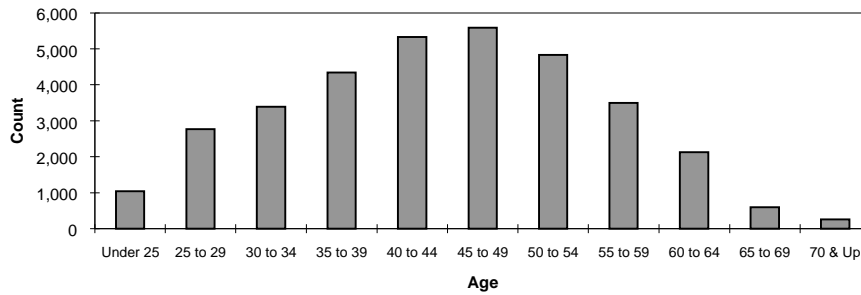


**KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEMS
DISTRIBUTION OF ACTIVE MEMBERS
as of December 31, 2001**

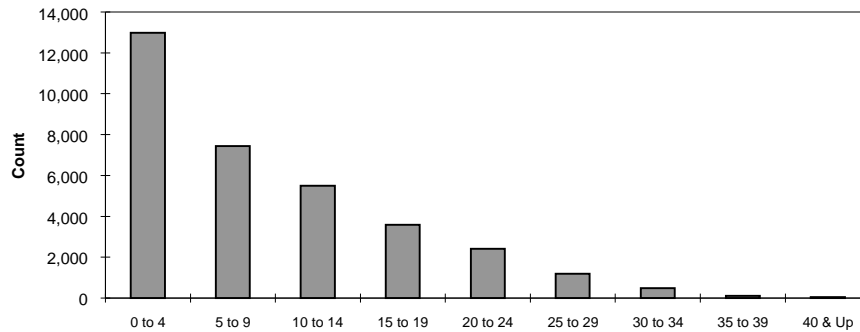
LOCAL

Age	Service									Total
	0 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 & Up	
Under 25	1,033	10	0	0	0	0	0	0	0	1,043
25 to 29	2,316	442	5	0	0	0	0	0	0	2,763
30 to 34	1,894	1,172	318	9	0	0	0	0	0	3,393
35 to 39	1,897	1,129	910	368	33	0	0	0	0	4,337
40 to 44	1,807	1,250	1,036	764	456	19	0	0	0	5,332
45 to 49	1,596	1,172	1,074	766	659	298	24	0	0	5,589
50 to 54	1,091	968	957	685	539	406	175	3	0	4,824
55 to 59	765	666	658	508	415	276	158	50	3	3,499
60 to 64	374	439	400	365	233	143	86	45	34	2,119
65 to 69	144	133	104	94	53	33	19	11	8	599
70 & Up	68	53	45	33	24	16	10	3	7	259
Total	12,985	7,434	5,507	3,592	2,412	1,191	472	112	52	33,757

Age Distribution



Service Distribution

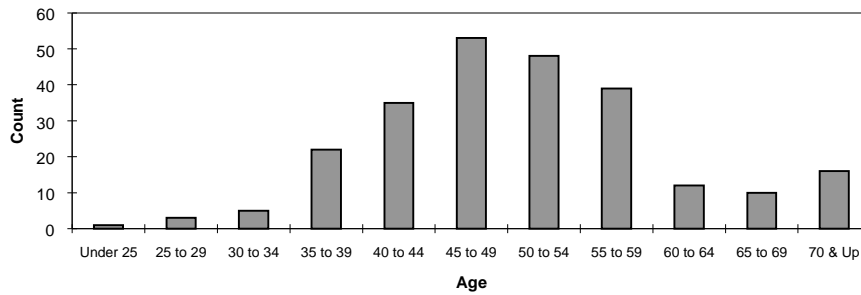


**KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEMS
 DISTRIBUTION OF ACTIVE MEMBERS
 as of December 31, 2001**

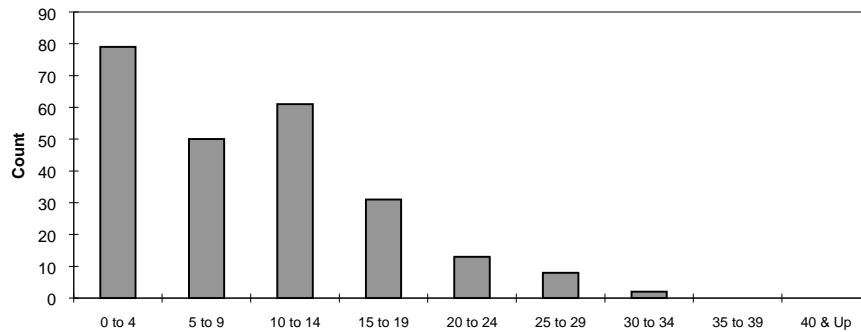
TIAA

Age	Service									Total
	0 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 & Up	
Under 25	1	0	0	0	0	0	0	0	0	1
25 to 29	3	0	0	0	0	0	0	0	0	3
30 to 34	4	1	0	0	0	0	0	0	0	5
35 to 39	10	4	7	1	0	0	0	0	0	22
40 to 44	14	10	5	6	0	0	0	0	0	35
45 to 49	13	13	13	10	4	0	0	0	0	53
50 to 54	7	9	20	7	3	2	0	0	0	48
55 to 59	8	6	13	4	3	5	0	0	0	39
60 to 64	1	2	2	2	3	1	1	0	0	12
65 to 69	6	1	1	1	0	0	1	0	0	10
70 & Up	12	4	0	0	0	0	0	0	0	16
Total	79	50	61	31	13	8	2	0	0	244

Age Distribution



Prior Service Distribution

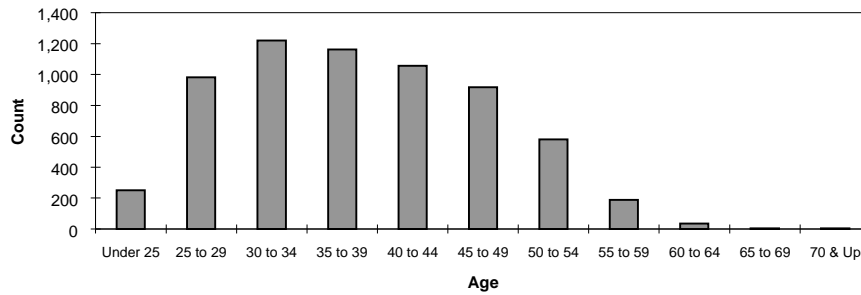


**KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEMS
DISTRIBUTION OF ACTIVE MEMBERS
as of December 31, 2001**

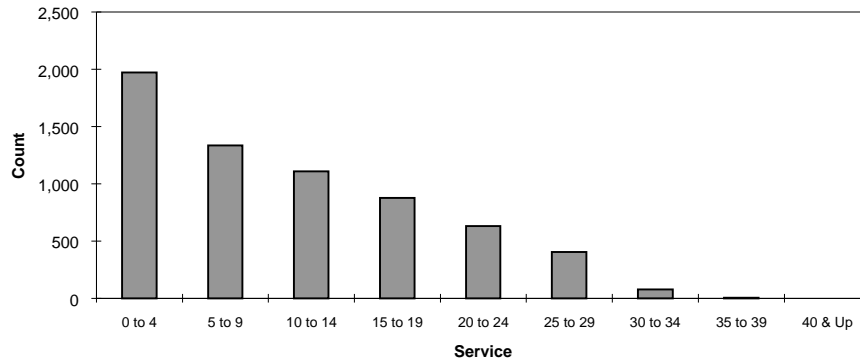
KP&F

Age	Service									Total
	0 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 & Up	
Under 25	250	1	0	0	0	0	0	0	0	251
25 to 29	778	203	1	0	0	0	0	0	0	982
30 to 34	508	556	155	1	0	0	0	0	0	1,220
35 to 39	217	293	443	204	5	0	0	0	0	1,162
40 to 44	111	143	268	357	172	6	0	0	0	1,057
45 to 49	51	70	117	198	295	185	1	0	0	917
50 to 54	30	41	75	82	133	177	43	0	0	581
55 to 59	18	17	38	26	26	31	30	4	0	190
60 to 64	4	11	7	7	0	5	2	1	0	37
65 to 69	1	0	3	0	0	0	0	0	0	4
70 & Up	3	1	0	0	0	0	0	0	0	4
Total	1,971	1,336	1,107	875	631	404	76	5	0	6,405

Age Distribution



Service Distribution

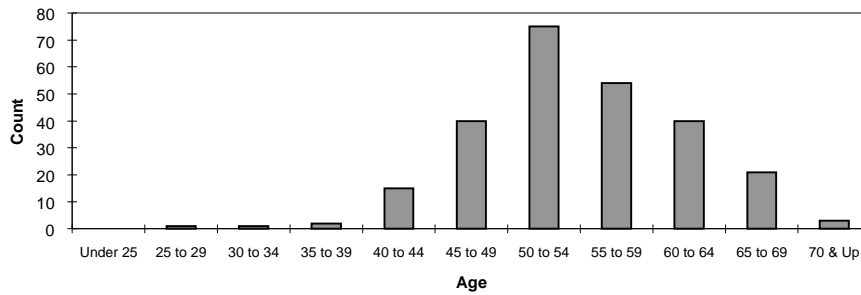


**KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEMS
DISTRIBUTION OF ACTIVE MEMBERS
as of December 31, 2001**

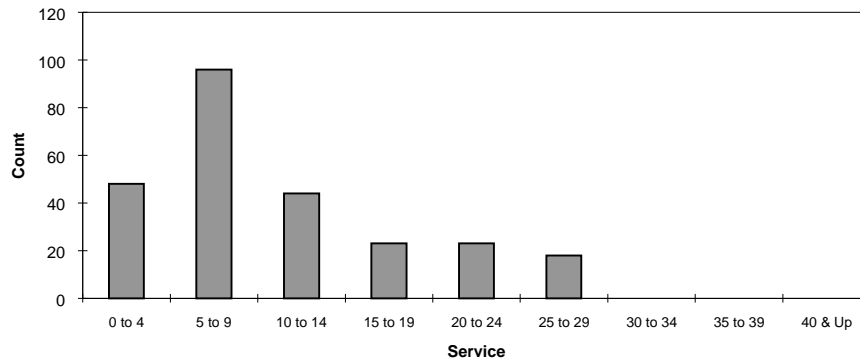
JUDGES

Age	Service									Total
	0 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 & Up	
Under 25	0	0	0	0	0	0	0	0	0	0
25 to 29	0	1	0	0	0	0	0	0	0	1
30 to 34	1	0	0	0	0	0	0	0	0	1
35 to 39	1	1	0	0	0	0	0	0	0	2
40 to 44	10	4	1	0	0	0	0	0	0	15
45 to 49	14	17	7	2	0	0	0	0	0	40
50 to 54	14	29	15	9	6	2	0	0	0	75
55 to 59	5	24	6	6	8	5	0	0	0	54
60 to 64	2	12	8	5	7	6	0	0	0	40
65 to 69	1	7	6	0	2	5	0	0	0	21
70 & Up	0	1	1	1	0	0	0	0	0	3
Total	48	96	44	23	23	18	0	0	0	252

Age Distribution



Service Distribution



APPENDIX B

SUMMARY OF PLAN PROVISIONS

Plan Membership

The Kansas Public Employees Retirement System (the Retirement System, or, the System), is an umbrella organization administering three statewide retirement systems: the Kansas Public Employees Retirement System (KPERS), the Kansas Police and Firemen's Retirement System (KP & F), and the Kansas Retirement System for Judges. All three systems are defined benefit, contributory plans that cover substantially all public employees in Kansas. The Kansas Retirement System for Judges is a single employer plan, while the other two are cost-sharing, multiple employer plans. Participation by the State of Kansas is mandatory, whereas participation by local political subdivisions is optional but irrevocable once elected. Benefit payments are also provided for a certain group of legislative employees.

Employee Membership

Membership is mandatory for all employees in covered positions, except elected officials. A covered position for non-school employees is one that is covered by Social Security, is not seasonal or temporary, and requires at least 1,000 hours of work per year. School employees become KPERS members on their date of employment. School employees who work at least 630 hours per year or 3.5 hours per day for at least 180 days are eligible for membership. Non-school employees become KPERS members after one year of continuous employment. Those who retire under the provisions of the Retirement System may not become contributing members again.

KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM

Summary of Provisions

Normal Retirement

Eligibility- Eligibility is (a) Age 65, or (b) age 62 with ten years of credited service, or (c) any age when combined age and years of credited service equal 85 "points". Age is determined by the member's last birthday and is not rounded up.

Benefits -Benefits are based on the member's years of credited service, Final Average Salary (FAS), and a statutory multiplier. For those who were hired prior to July 1, 1993, Final Average Salary equals the greater of either: a four-year Final Average Salary, including add-ons, such as sick and annual leave; or a three-year Final Average Salary, excluding add-ons, such as sick and annual leave. For those who are hired on or after July 1, 1993, Final Average Salary equals the average of the three highest years of service, excluding add-ons, such as sick and annual leave.

Prior Service Credit - Prior service credit is 0.75% or 1% of Final Average Salary per year [School employees receive 0.75% Final Average Salary for each year of prior service that is not credited under the former Kansas School Retirement System (KSRS)].

Participating Service Credit - Participating service credit is 1.75% of Final Average Salary.

Early Retirement

Eligibility - Eligibility is age 55 and ten years of credited service.

Benefit - The normal retirement benefit is reduced 0.2% per month for each month between the ages of 60 and 62, plus 0.6% for each month between the ages of 55 and 60.

Vesting Requirements

Eligibility - A member must have ten years of credited service. Should the vested member terminate employment, the member must leave accumulated contributions on deposit with the Retirement System to be eligible for future benefits. If a vested member terminates employment and withdraws accumulated contributions, the member forfeits all rights and privileges under the Retirement System.

Benefit - Retirement benefits are payable when the vested member reaches normal retirement age, or reduced benefits are payable when the vested member reaches a specified early retirement age.

Other Benefits

Withdrawal Benefit - Members who terminate employment may withdraw contributions with interest after the last day on the employer's payroll. Withdrawing contributions forfeits all membership rights and benefits, which a member may have accrued prior to withdrawing their contributions from the Retirement System. Former members, who return to covered employment within five years after terminating employment, will not have lost any membership rights or privileges if they *haven't* withdrawn contributions. The Retirement Act provides for withdrawal of contributions 30 days after employment terminates, but it does not allow members to borrow from contributions.

Disability Benefit - Members receiving disability benefits under the KPERS Death and Disability Benefits Program continue to receive service credit under KPERS. If a disabled member retires after receiving disability benefits for at least five years immediately preceding retirement, the member's Final Average Salary is adjusted by the actuarial salary increase assumption rates in existence during the member's period of disability prior to July 1, 1993, 5% per year to July, 1998 and the change in CPI-U less 1%, not to exceed 4% after July, 1998.

Death Benefits - Pre-retirement death (non-service connected) - The member's accumulated contributions plus interest are paid in a lump sum to the designated beneficiary. In lieu of receiving the member's accumulated contributions, the surviving spouse of a member who is eligible to retire at death may elect to receive benefits under any survivor option. The spouse must be the member's sole designated beneficiary to exercise this option. If the member had at least 15 years of credited service, but had not reached retirement age, the spouse may elect to leave the member's contributions on deposit with the System and receive a monthly benefit to begin on the date the member would have been eligible to retire.

Service-connected accidental death - The member's accumulated contributions plus interest, plus lump sum amount of \$50,000, plus annual benefit based on 50% of Final Average Salary; reduced by Workers' Compensation benefits and subject to a minimum benefit of \$100 a month; are payable to a spouse, minor children, or dependent parents, for life, or until the youngest child reaches age 18 (or up to age 23 if they are full-time students), in this order of preference. The monthly accidental death benefit is in lieu of any joint/survivor benefit for which the surviving spouse would have been eligible.

Post-retirement death - A lump sum amount of \$4,000 is payable to the member's beneficiary. If the member has selected a retirement option, benefits are paid to the joint annuitant or the designated beneficiary. Under joint and survivor retirement options, if the joint annuitant predeceases the retired member, the reduced option benefit is increased to the amount the retired member would have received if no retirement option had been elected. Benefits payable to a joint annuitant cease at the joint annuitant's death. If a member does not select an option, the designated beneficiary receives the excess, if any, of the member's accumulated contributions plus interest over total benefits paid to date of death.

Member Contributions

Member contributions are 4% of compensation. Interest is credited to members' contribution accounts on June 30 each year, based on account balance as of the preceding December 31. Those who became members prior to July 1, 1993, have interest credited to their accounts at the rate of 8% per year. Those who become members on and after July 1, 1993, have interest credited to their accounts at the rate of 4% per year.

Employer Contributions

Rates are certified by the Board of Trustees, based on the results of annual actuarial valuations.

Board of Regents Plan Members (TIAA and equivalents)

Board of Regents plan members (TIAA and equivalents) do not make contributions to KPERS. They receive prior service benefits for service before 1962; the benefit is 1% of Final Average Salary for each year of credited prior service. Service after 1961 is counted for purposes of determining eligibility for vesting.

Correctional Members

Correctional employees, as certified to the Board of Trustees by the Secretary of Corrections, are defined in K.S.A. 74-4914a: (a) correctional officers, (b) certain directors and deputy directors of correctional institutions, (c) correctional power plant operators, (d) correctional industries employees, (e) correctional food service employees, and (f) correctional maintenance employees.

For groups (a) and (b) with at least three consecutive years of credited service, in such positions immediately preceding retirement, normal retirement age is 55 or Rule of 85 and early retirement requirements are age 50 with ten years of credited service. For groups (c), (d), (e), and (f) with at least three consecutive years of service in such positions immediately preceding retirement, normal retirement age is 60 or Rule of 85 and early retirement requirements are 55 with ten years of credited service.

KANSAS POLICE & FIREFIGHTER'S RETIREMENT SYSTEM

Normal Retirement

Tier I* - age 55 and 20 years of service. **Tier II**** - age 50 and 25 years of service, or age 55 and 20 years of service, or age 60 and 15 years of service.

Benefits - Benefits are based on the member's Final Average Salary. For those who were hired prior to July 1, 1993, Final Average Salary equals the average of the highest three of the last five years of credited participating service, including add-ons, such as sick and annual leave. For those who are hired on or after July 1, 1993, Final Average Salary equals the average of the highest three of the last five years of participating service, excluding add-ons, such as sick and annual leave. Benefits are based on a member's years of credited service and a multiplier of 2.5% of Final Average Salary for each year of credited service, to a maximum of 80% of Final Average Salary.

Local Plan - For members covered by local plan provisions on the employer's entry date, normal retirement is at age 50 with 22 years of credited service.

Early Retirement

Eligibility -Members must be at least age 50 and have 20 years of credited service.

Benefit - Normal retirement benefits are reduced 0.4% per month under age 55.

Vesting Requirements

Eligibility - Tier I *: The member must have 20 years of service credit; if terminating employment, the member must leave contributions on deposit with the Retirement System to be eligible for future benefits. Unreduced benefits are payable at age 55 or reduced benefits are payable as early as age 50.

Eligibility - Tier II**: The member must have 15 years of service credit to be considered vested. If terminating employment, the member must leave contributions on deposit with the Retirement System to be eligible for future benefits. A vested member may draw unreduced benefits as early as age 50 with 25 years of credited service, age 55 with 20 years of credited service, or age 60 with 15 years of credited service. A reduced benefit is available at age 50 with 20 years of credited service.

Other Benefits

Withdrawal Benefits - Members who terminate employment before retirement may withdraw contributions with interest after the last day on the employer's payroll. Withdrawal of contributions forfeits all membership rights and benefits, which a member may have accrued prior to withdrawing accumulated contributions from the Retirement System. Former members, who return to covered employment within five years after terminating employment, will not have lost any membership rights or privileges if they haven't withdrawn contributions.

Disability Benefits

Tier I*: Service-connected disability - There are no age or service requirements to be eligible for this benefit. There is an annual benefit of 50% of Final Average Salary, plus 10% of Final Average Salary for each dependent child under age 18 (or up to age 23 for full-time students), to a maximum of 75% of Final Average Salary. If dependent benefits aren't payable, the benefit is 50% of Final Average Salary or 2.5% for each year of credited service up to a maximum of 80% of Final Average Salary. Upon the death of a member after two years from the proximate cause of death which is the original service-connected disability, the same benefits are payable. Upon the death of a member after 2 years from a cause different than the disability for which the member is receiving service-connected disability benefits, the surviving spouse receives a lump sum payment of 50% of Final Average Salary. Additionally, a pension benefit of one-half the member's benefit is payable to either the spouse or to the dependent children.

Tier I*: Non-Service-connected disability – An annual benefit of 2.5% times years of credited service times Final Average Salary with a minimum of 25% of FAS and a maximum of 80% of FAS.

Tier II**: There is no distinction between service-connected and non-service-connected disability benefits. Annual benefit of 50% of Final Average Salary. Service Credit is granted during the period of disability. Disability benefits convert to age and service retirement at the earliest date the member is eligible for full retirement benefits. If the member is disabled for at least five years immediately preceding retirement, the member's Final Average Salary is adjusted during the period of Disability.

Death Benefits (Tier I* and Tier II)**

Active Member Service Connected Death - There is no age or service requirement. An annual benefit of 50% of Final Average Salary is payable to the spouse, plus 10% of Final Average Salary for each dependent child under age 18 [or up to age 23 if full time student(s)], to a maximum of 75% of Final Average Salary Active Member.

Active Member Non-Service Connected Death - A lump sum of 100% of Final Average Salary is payable to the spouse and a pension of 2.5% of Final Average Salary per year of credited service (to a maximum of 50%) is payable to the spouse. If there is no spouse, the monthly benefit is paid to the dependent children (age 18 or 23 if a full time student). If there is no surviving spouse or eligible children, the beneficiary will receive a lump sum payment of 100% of the member's current annual pay inclusive of the member's accumulated contributions.

Inactive Member Death - If an inactive member is eligible for retirement when death occurs, and the inactive member's spouse is the sole beneficiary, the spouse may elect to receive benefits as a joint annuitant under any option in lieu of a refund of the member's accumulated contributions.

Post-Retirement Death – There is a lump sum amount of \$4,000 payable, less any death benefit payable under local plan provisions. If the member has selected a retirement option, benefits are paid to the joint annuitant or the designated beneficiary. Under joint and survivor options, if the joint annuitant predeceases the retired member, the benefit is increased to the amount the retired member would have received if no option had been selected. Benefits payable to the joint annuitant cease when the joint annuitant dies. If no option is selected, the designated beneficiary receives the excess, if any, of the member's accumulated contributions over total benefits paid to the date of death. The surviving spouse of a transfer member (who was covered by local plan on the employer's entry date, who dies after retirement, and who has not elected a retirement benefit option) receives a lump sum payment of 50% of Final Average Salary. Additionally, a pension benefit of three-fourths of the member's benefit is payable either to the spouse or dependent children.

Classifications

***Tier I** - Members have Tier I coverage if they were employed prior to July 1, 1989, and they did not elect coverage under Tier II.

****Tier II** - Members have Tier II coverage if they were employed July 1, 1989, or later. This also includes members employed before July 1, 1989 who elected Tier II coverage.

Some KP&F members are considered either Tier I or Tier II Transfer or Brazelton members.

Transfer Member- member who is a former member of a local plan who elected to participate in KP&F. Former Kansas Highway Patrol and former Kansas Bureau of Investigation members are included in this group.

Brazelton member – member who participated in a class action lawsuit, whose contribution is lower, and whose benefits are offset by Social Security.

Member Contributions

Member contributions are 7% of compensation. For members with 32 years of credited service, the contribution rate is reduced to 2% of compensation.

Brazelton members contribute .008% with a Social Security offset. Benefits payable to these members are reduced by one-half of original Social Security benefits accruing from employment with the participating employer.

Employer Contributions

Individual rates are certified by the Board of Trustees for each participating employer based on the results of annual actuarial valuations.

KANSAS JUDGES RETIREMENT SYSTEM

Normal Retirement

Eligibility: - (a) Age 65, or (b) age 62 with ten years of credited service, or (c) any age when combined age and years of credited service equals 85 "points". Age is determined by the member's last birthday and is not rounded up.

Benefit - the benefit is based on the member's Final Average Salary, which is the average of the three highest years of service under any retirement system administered by KPERS. The basic formula for those who were members prior to July 1, 1987, is 5% of Final Average Salary for each year of service up to ten years, plus 3.5% for each year of service greater than ten, to a maximum of 70% of Final Average Salary. For those who became members on or after July 1, 1987, the formula is 3.5% for each year, to a maximum benefit of 70% of Final Average Salary.

Early Retirement

Eligibility - A member must be age 55 and have ten years of credited service to take early retirement.

Benefit - The retirement benefit is reduced to 0.2% per month for each month between the ages of 60 and 62, plus 0.6% per month for each month between the ages of 55 and 60.

Vesting Requirements

Eligibility - There is no minimum service requirement; however, if terminating employment, the member must leave contributions on deposit with the Retirement System in order to be eligible for future benefits. Eligible judges who have service credited under KPERS have vested benefits under both KPERS and the Retirement System for Judges when the combined total credited service equals ten years.

Benefit - Normal benefit accrued at termination is payable at age 62 or in reduced amount at age 55, provided the member has ten years of service credit. Otherwise, benefits are not payable until age 65.

Other Benefits

Disability Benefits - These benefits are payable if a member is defined as totally and permanently disabled as certified by the Supreme Court. The disability benefit, payable until age 65, is 3.5% of Final Average Salary for each year of service (minimum of 25% and maximum of 70% of Final Average Salary). Benefits are recalculated when the member reaches retirement age based on participating service credit for the period of disability. If a judge is disabled for at least five years immediately preceding retirement, the judge's Final Average Salary is adjusted.

Withdrawal Benefit - Members who terminate employment may withdraw contributions with interest, but forfeit any right to a future benefit.

Pre-retirement Death - A refund of the member's accumulated contributions is payable. In lieu of receiving the member's accumulated contributions, the surviving spouse of a member who is eligible to retire at death, may elect to receive benefits under any survivor benefit option. If the member had at least 15 years of credited service, but hadn't reached retirement age at the time of death, the spouse may elect

a monthly benefit to begin on the date the member first would have been eligible to retire as long as the member's contributions aren't withdrawn.

Post-retirement Death - A lump sum death benefit of \$4,000 is payable to the member's beneficiary. If the member had selected an option with survivor benefits, those benefits are paid to the joint annuitant or to the member's designated beneficiary. Under retirement options with survivor benefits, if the joint annuitant predeceases the retired member, the retirement benefit is increased to the amount the retired member would have received if no survivor benefits had been elected. Benefits payable to a joint annuitant cease when the joint annuitant dies. If no option was chosen by the retired member, the member's designated beneficiary receives the excess, if any, of the member's accumulated contributions over the total benefits paid to the date of the retired member's death.

Member Contributions

Judges contributions are 6% of compensation. Upon reaching the maximum retirement benefit level of 70% of Final Average Salary, the contribution rate is reduced to 2%.

Employer Contributions

Rates are certified by the Board of Trustees, based on the results of annual actuarial valuations.

APPENDIX C
ACTUARIAL ASSUMPTIONS AND METHODS

KPERS

Rate of Investment Return 8.0%

Implicit Inflation Rate 3.5%

Rates of Mortality School (Male): 1994 GAM Male Table
 School (Female): 1994 GAM Female Table -1
 NonSchool (Male): 1994 GAM Male Table +2
 NonSchool (Female): 1994 GAM Female Table +1

Disabled Life Mortality 1994 GAM Table Set forward 12 years

Rates of Salary Increase	<u>Years of Service</u>	<u>State</u>	<u>Rate of Increase*</u>	
			<u>School</u>	<u>Local</u>
	1	7.8%	9.8%	7.8%
	5	5.6%	6.7%	6.2%
	10	4.9%	5.1%	5.2%
	15	4.4%	4.6%	4.8%
	20	4.1%	4.1%	4.6%
	25	4.0%	4.0%	4.1%
	30	4.0%	4.0%	4.0%

*Includes general wage increase assumption of 4.0% (composed of 3.5% inflation and 0.50% productivity)

Rates of Termination

Age	School – Male				
	Years of Service				
	<2	2	3	4	5 or more
25	23.0%	19.0%	13.0%	10.0%	10.0%
30	20.5%	17.2%	12.5%	10.0%	6.0%
35	19.7%	16.0%	12.0%	10.0%	4.3%
40	19.3%	15.6%	12.0%	10.0%	3.2%
45	18.8%	15.3%	12.0%	10.0%	2.6%
50	18.4%	14.9%	12.0%	10.0%	2.1%

School - Female					
Years of Service					
Age	<2	2	3	4	5 or more
25	26.0%	20.7%	17.5%	11.3%	11.5%
30	23.5%	16.2%	14.4%	9.2%	8.0%
35	20.0%	13.5%	12.5%	8.0%	4.8%
40	16.5%	11.3%	9.0%	7.3%	3.0%
45	14.0%	10.2%	8.7%	7.1%	2.0%
50	13.4%	9.9%	8.5%	7.0%	2.0%

State - Male					
Years of Service					
Age	<2	2	3	4	5 or more
25	18.0%	19.1%	16.3%	14.0%	10.0%
30	18.0%	15.3%	13.0%	11.1%	10.0%
35	15.0%	13.3%	11.4%	9.8%	5.9%
40	15.0%	12.0%	10.3%	8.8%	4.0%
45	13.0%	11.7%	10.0%	8.5%	3.0%
50	13.0%	11.4%	9.8%	8.4%	2.0%

State - Female					
Years of Service					
Age	<2	2	3	4	5 or more
25	25.0%	23.0%	19.1%	15.0%	16.9%
30	20.5%	18.9%	15.7%	12.3%	10.8%
35	17.8%	16.4%	13.4%	10.7%	6.6%
40	16.3%	15.0%	11.4%	9.8%	4.7%
45	15.8%	14.5%	10.2%	9.5%	3.5%
50	15.5%	14.3%	10.2%	9.3%	3.5%

Local - Male					
Years of Service					
Age	<2	2	3	4	5 or more
25	23.0%	19.5%	16.1%	15.0%	12.0%
30	18.0%	15.3%	12.6%	11.7%	9.5%
35	15.0%	12.0%	10.5%	9.8%	5.7%
40	12.5%	10.6%	8.8%	8.1%	4.1%
45	11.3%	10.0%	7.9%	7.3%	3.6%
50	11.0%	10.0%	7.7%	7.2%	3.2%

Age	Local - Female Years of Service				
	<2	2	3	4	5 or more
25	25.0%	22.5%	18.8%	15.8%	12.0%
30	20.0%	18.0%	15.0%	12.6%	8.8%
35	17.5%	15.8%	13.1%	11.0%	7.3%
40	15.8%	14.2%	11.9%	10.0%	5.5%
45	15.3%	13.8%	11.5%	9.6%	4.5%
50	15.0%	13.5%	11.3%	9.5%	4.0%

Retirement Rates

School

		Rule of 85	
		1st Year With 85 Points	After 1st Year With 85 Points
<u>Age</u>			
53		20%	10%
55		20%	15%
57		25%	15%
59		25%	25%
61		35%	35%
<u>Early Retirement</u>		<u>Normal Retirement</u>	
<u>Age</u>	<u>Rate</u>	<u>Age</u>	<u>Rate</u>
55	3%	62	40%
56	3%	63	30%
57	3%	64	35%
58	5%	65	40%
59	10%	66	20%
60	10%	67	20%
61	20%	68	20%
		69	20%
		70	100%

State

		Rule of 85	
		1st Year With 85 Points	After 1st Year With 85 Points
<u>Age</u>			
53		17%	15%
55		17%	15%
57		17%	15%
59		15%	15%
61		30%	25%

<u>Early Retirement</u>		<u>Normal Retirement</u>	
<u>Age</u>	<u>Rate</u>	<u>Age</u>	<u>Rate</u>
55	3%	62	40%
56	3%	63	25%
57	3%	64	30%
58	3%	65	45%
59	5%	66	30%
60	7%	67	25%
61	20%	68	25%
		69	20%
		70	100%

Local

<u>Age</u>	<u>Rule of 85</u>	
	<u>1st Year With 85 Points</u>	<u>After 1st Year With 85 Points</u>
53	10%	5%
55	10%	10%
57	10%	10%
59	10%	15%
61	25%	25%

<u>Early Retirement</u>		<u>Normal Retirement</u>	
<u>Age</u>	<u>Rate</u>	<u>Age</u>	<u>Rate</u>
55	3%	62	35%
56	3%	63	25%
57	3%	64	25%
58	3%	65	40%
59	5%	66	20%
60	5%	67	20%
61	15%	68	20%
		69	20%
		70	100%

- Inactive vested members – Age 62
- For correctional employees with an age 55 normal retirement date -

<u>Age</u>	<u>Rate</u>
55	10%
58	15%
60	15%
62	35%
65	100%

- For correctional employees with an age 60 normal retirement date – Age 62.
- For TIAA employees – Age 66.

Rates of Disability

<u>Age</u>	<u>School</u>	<u>State</u>	<u>Local</u>
25	.025%	.036%	.030%
30	.025%	.146%	.065%
35	.035%	.230%	.097%
40	.050%	.305%	.130%
45	.096%	.376%	.190%
50	.213%	.511%	.330%
55	.452%	.892%	.600%
60	.850%	1.400%	1.200%

Indexation of Final Average Salary for Disabled Members: 2.5% per year

Probability of Vested Members Leaving Contributions With System

<u>Age</u>	<u>School</u>	<u>State</u>	<u>Local</u>
25	60%	51%	35%
30	60%	51%	40%
35	65%	53%	47%
40	74%	63%	61%
45	83%	69%	71%
50	88%	83%	82%
55	100%	100%	100%

Marriage Assumption: 70% of all members are assumed married with male spouse assumed 3 years older than female.

KP & F

Rate of Investment Return 8.0%

Implicit Inflation Assumption 3.5%

Rates of Mortality 1994 GAM Table*
*70% of preretirement deaths assumed to be service related

Disabled Life Mortality 1994 GAM Table Set forward 12 years

Rates of Salary Increase	<u>Years of Service</u>	<u>Rate of Increase*</u>
	1	12.5%
	5	7.0%
	10	4.9%
	15	4.3%
	20	4.0%
	25	4.0%

*Includes general wage increase assumption of 4.0% (composed of 3.5% inflation and 0.50% productivity)

Rates of Termination

Tier I: 3% for ages less than 41; 0% thereafter

	<u>Years of Service</u>	<u>Rate</u>
Tier II:	1	13.0%
	5	6.0%
	10	2.5%
	15	1.0%
	20	1.0%
	25	0.0%

Retirement Rates

Tier I:	<u>Early Retirement</u>		<u>Normal Retirement</u>	
	<u>Age</u>	<u>Rate</u>	<u>Age</u>	<u>Rate</u>
	50	5%	55	60%
	51	5%	56	25%
	52	10%	57	20%
	53	20%	58	35%
	54	30%	59	65%
			60	100%

Tier II:	<u>Early Retirement</u>		<u>Normal Retirement</u>	
	<u>Age</u>	<u>Rate</u>	<u>Age</u>	<u>Rate</u>
	50	10%	50	45%
	51	10%	53	30%
	52	10%	55	30%
	53	10%	58	20%
	54	25%	60	100%

Inactive Vested: Assumed to retire at later of (i) eligibility for unreduced benefits or (ii) age 55.

Rates of Disability	<u>Age</u>	<u>Rate</u>
	22	.06%
	27	.07%
	32	.15%
	37	.35%
	42	.60%
	47	1.00%
	52	1.60%
	57	2.55%

**90% assumed to be service-connected under KP & F Tier I.

Marriage Assumption: 80% of all members assumed married with male spouse assumed to be three years older than female.

Judges

Rate of Investment Return	8.0%
Implicit Inflation Assumption	3.5%
Rates of Mortality	1994 GAM Table
Rates of Salary Increase	5.5%
Rates of Termination	None assumed
Disabled Life Mortality	Same as Healthy Lives
Rates of Disability	None assumed
Retirement Age	Age 64 or current age, if greater

Marriage Assumption: 70% of all members are assumed married with male spouse assumed 3 years older than female.

Actuarial Methods

1. Funding Method

KPERS

Under the Projected Unit Credit actuarial cost method, the normal cost for any year is equal to the actuarial present value of the benefits allocated to that year. The actuarial present value of benefits that are allocated to prior years is called the actuarial liability.

The portion of the actuarial liability in excess of plan assets is funded according to a schedule that is intended to amortize such unfunded actuarial liability fully after a period of years. This is in addition to each year's employer normal cost. Under this cost method, actuarial gains and losses are directly reflected in the size of the unfunded actuarial liability, which is recalculated each year.

For KPERS, the unfunded actuarial liability is amortized over a period originally set at 40 years beginning July 1, 1993. The annual amortization payments will increase 4% for each year remaining in the 40-year amortization period. As a result, if total payroll grows 4% per year, as assumed, the amortization payment will remain level as a percentage of total current payroll. The

increase in the unfunded actuarial liability resulting from the 1998 COLA is amortized as a level percent of payroll over 15 years.

For the closed group of KPERS-TIAA members, the unfunded actuarial liability is amortized by annual level dollar payments over a period of 10 years from July 1, 1993. This period was extended by one year, effective with the 1998 actuarial valuation.

KP&F

The Aggregate Actuarial Cost Method with Supplemental Unfunded Actuarial Liability (UAL) is used for KP&F. This method develops a normal cost rate on a group, or aggregate, basis. The Supplemental Unfunded Liability was initially established in 1993 to reflect the increase in the actuarial liability (using the Projected Unit Credit cost method) due to the benefit enhancement package passed in that year. The Supplemental UAL is amortized over 40 years measured from July 1, 1993 with payments increasing 4% per year. A separate amortization base was established for the ad hoc COLA granted in 1998. This UAL is amortized over 15 years with the payment increasing 4% per year. As of December 31, 2000 the Supplemental UAL was re-established with the resulting UAL set to zero. The COLA UAL amortization base/payments remain unchanged.

Judges

The Frozen Entry Age Cost Method is used. The frozen unfunded actuarial liability (UAL) was established in 1993 with payments over 40 years as a level dollar amount. The UAL is frozen and reflects changes only due to a change in plan provisions or actuarial assumptions. Actuarial gains/losses are reflected in the calculation of the normal cost rate.

2. Asset Valuation Method

For actuarial purposes, assets are valued at expected value (based on the actuarial assumed rate of return) at the valuation date (based on the actuarial assumption) plus one-third of the difference between the market value and expected value.

APPENDIX D

GLOSSARY OF TERMS

Actuarial Accrued Liability	The difference between the actuarial present value of system benefits and the actuarial value of future normal costs. Also referred to as “accrued liability” or “actuarial liability”.
Actuarial Assumptions	Estimates of future experience with respect to rates of mortality, disability, turnover, retirement, rate or rates of investment income and salary increases. Decrement assumptions (rates of mortality, disability, turnover and retirement) are generally based on past experience, often modified for projected changes in conditions. Economic assumptions (salary increases and investment income) consist of an underlying rate in an inflation-free environment plus a provision for a long-term average rate of inflation.
Accrued Service	Service credited under the system which was rendered before the date of the actuarial valuation.
Actuarial Equivalent	A single amount or series of amounts of equal actuarial value to another single amount or series of amounts, computed on the basis of appropriate assumptions.
Actuarial Cost Method	A mathematical budgeting procedure for allocating the dollar amount of the actuarial present value of retirement system benefit between future normal cost and actuarial accrued liability. Sometimes referred to as the “actuarial funding method”.
Experience Gain (Loss)	The difference between actual experience and actuarial assumptions anticipated experience during the period between two actuarial valuation dates.
Actuarial Present Value	The amount of funds currently required to provide a payment or series of payments in the future. It is determined by discounting future payments at predetermined rates of interest and by probabilities of payment.
Amortization	Paying off an interest-discounted amount with periodic payments of interest and principal, as opposed to paying off with lump sum payment.
Normal Cost	The actuarial present value of retirement system benefits allocated to the current year by the actuarial cost method.

APPENDIX D (continued)

Unfunded Actuarial Accrued Liability The difference between actuarial accrued liability and the valuation assets. Sometimes referred to as “unfunded actuarial liability” or “unfunded accrued liability”.

Most retirement systems have unfunded actuarial accrued liability. They arise each time new benefits are added and each time an actuarial loss is realized.

The existence of unfunded actuarial accrued liability is not in itself bad, any more than a mortgage on a house is bad. Unfunded actuarial accrued liability does not represent a debt that is payable today. What is important is the ability to amortize the unfunded actuarial accrued liability and the trend in its amount (after due allowance for devaluation of the dollar).